PHOTO-LITHOGRAPHER AUGUST,

Million

The thoughts of lithographers all over the country are being focused on the Wardman Park Hotel, Washington, D. C., where the sixth annual convention of the N.A.P.L. will be held on October sixth, seventh and eighth.

SENELITH INKS... are "TOPS" in quality

No inks rate higher in the estimation of offset lithographers who demand materials of unquestionable excellence . . . who cannot afford to worry around with inks less likely to give the fine results required.

With all the exacting demands on an offset ink . . . to print full tone even after being thinned to flow easily and then having the film split in half by the rubber blanket, for instance . . . it means something when a line of inks in so many brilliant colors can maintain such a reputation for unvarying high quality through so many years.

A full description of the manufacture of inks and fine dry colors and helpful suggestions for the elimination of many offset ink troubles are given in our booklet "Inks, Lithographic and Printing", which we will be glad to send on request.

SCHELITH DIRFAX

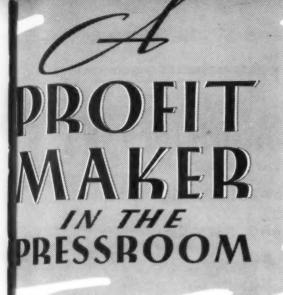
The great tinctorial strength excellent sunfastness, and easy flowing consistency possessed by sodium tung state calors have played an important part in the extraordinary development of off set-lithography. The first lithographic link made with the sodium language process pigment in our Permanent Purple 62. We are now making a full line of permanent offset toners according to this process.

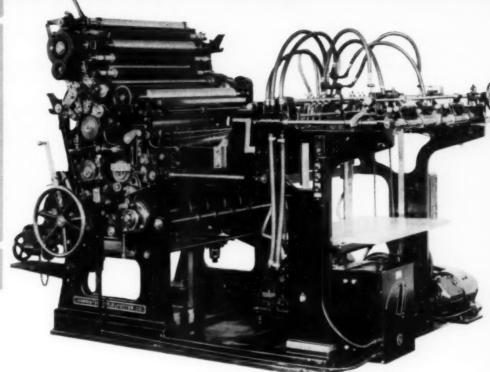
FAST RED TONER 229P

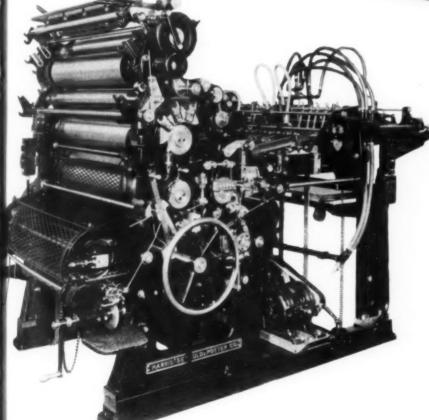
Senelith Fast Red Toner 229P not only prints a rich red even under trying conditions that will cause some other reds to look pink, but it stays red. It has maximum tinctorial strength and easy working qualities.

Resistance Light: Excellent. Alkali: Good

The Senelith Ink Company, Inc. 32-34 GREENE STREET NEW YORK, N. Y.







FOR MODERN SPEED AND ACCURACY IN QUANTITY-QUALITY PRODUCTION

Adapted to the Needs of the Photo-Lithographic Plant

Harris LSB 17" x 22" and LSN 21"x 28" Offset Presses are production leaders in their size classifications.

The 17" x 22", the smallest in size, and the 21" x 28" offset press representing the intermediate size in the small press commercial group of single color offsets, are built to Harris standards and always the choice of the leaders. The third press in this group that sets the standard for a whole industry is the EL 22" x 34".

BUILT BY THE PIONEER BUILDERS OF SUCCESSFUL OFFSET PRESSES

HARRIS · SEYBOLD · POTTER COMPANY

Seneral Offices: 4510 East 71st St., Cleveland, Ohio Harris Sales Offices. New York, 316 West 42nd St. . Chicago 43 South Dearborn St. . Dayton, 819 Washington St. . San Francisco, 420 Market St. . Factories: Cleveland, Dayton

SENEFELDER has "everything for lithography"

Buy from Senefelder and enjoy one responsibility and one high standard of materials, workmanship and service

Absorbent Cotton Acids, Litho Acid Brushes Alum Powder Aluminum Plates Antifin Rubber

Preserver
Asphaltum Liquid
Asphaltum Powder
Berlin Paper
Bronze Powders
Bronzing Pads
Carborundum
Powder
Caustic Soda
Charcoal Sticks

Charcoal Sticks
Chemicals, Litho
China Marbles
Cold Top Enamel
Collodion Emulsion
Columbia Paper
Copierlack
Cornelin Solution
Correction Slips
Counter Etch
"Convenient"

Crayon Holders

Cravon Ink Crayon Pencils Crayon Transfer Paper Crayons, Litho Deep-Etch Supplies Developing Ink Double Etch Salt Egg Albumen Engrav. Needles Engrav. Stones Etches Excelsior Paper Felt Daubers Film Filters Flannel, Litho Flint, Graining Fly Cord Fountain Etch French Chalk Gamburger Slips Gelatine Foils Glass Marbles Glycerine Graining Marbles

Graining Quartz

Gum Arabic Hand Rollers Hydroquinone

Impression Rubber Sheeting India Paper Ink Mullers Ink Knives Ink Slabs Kalinin Drier Lavender Oil Liquid Tusche Litho Inks Litho Stones Lump Pumice Maple Balls Mica Powder Moleskin Molleton Mutton Tallow Negative Brushes Negative Collodion Negative Glass Negative Varnish Neg-O-Lac Nitric Acid Offset Blankets Offset Inks Offset Powder Opaque Palm Oil Pen Ink Pens, Litho Photographic

Gelatine

Press Boards

Printing Inks

Process Glue

Proofing Inks

Pumice Powder

Quartz, Graining

Process Oil

Planium Etch Salt

Plates, Lithographic

Rolling-up Ink Rosin Fowder Rubber Snake Slips

Rubbing Stones Schumacher Slips Scotch Hone Scotch Slips Scotch Tape Scraper Leather Scraperwood Senebumen Senelac Varnish Sharp Etch Snake Slips Soapstone Sponges Steel Balls Steelclay Marbles Stone Cement Strecker Salt Sulphur Flour Tracing Blue Tracing Paper Transfer Ink Transfer Papers

Solution Tusche Varnishes Wire Brushes Zinc Plates Etc. Etc.

Transparency



FOR INSTANCE CONSIDER

SENEFELDER ROLLING-UP INK

When lithographic designs or engravings are transferred from the original stone or plate to the actual printing surface a specially prepared ink is used for rolling-up or inking-in the transferred printing image. This Rolling-up lnk must have good acid-resisting properties to prevent it from smearing or piling-up on the plate.

Senefelder Rolling-up Ink is made according to the original formula of Aloys Senefelder as he developed it when he invented lithography; it has been adapted for use on zinc and aluminum plates as well as for use on lithographic stones.

Senefelder Rolling-up Ink contains the finest Carbon Black obtainable; it is ground in pure linseed oil varnish together with other essential ingredients.

Senefelder Rolling-up Ink can be used with the ordinary transfer process or with the Transfer Sharp Method; it is guaranteed to be free from harmful ingredients and will not smear or pile-up on the plate.

Senefelder Rolling-up Ink can be used for rolling-up commercial work transfers which are usually pulled with India Transfer Paper as well as for rolling-up color work transfers which are usually pulled with Excelsior Paper; it is used extensively throughout the lithographic industry.

Senefelder Rolling-up Ink is packed in one pound cans at \$3.00 per lb.; larger containers are correspondingly lower in price.

Full directions for the Transfer Sharp Method as well as of the correct procedure for etching all kinds of transfer plates are given in our booklet "Lithographic Etches" which can be obtained on request.

THE SENEFELDER COMPANY, INC.

32-34 GREENE ST.

"Everything for Lithography"

NEW YORK, N. Y.

THE PHOTO-LITHOGRAPHER

Published in the Interests of Lithographers to Increase Sales, Efficiency and Quality

WALTER E. SODERSTROM, Editor

DONALD L. GUTELIUS, Associate Editor

SAMUEL D. WOLFF, Advertising Manager

Volume VI

AUGUST, 1938

Number 8

What You Will Find in This Issue

A Few Reasons Why You Should Attend the N. A. P. L. Convention 13	Retailers Follow the Crowd William Robins 29	
Candid Layout Will Help to Sell Your Product	Build Business with Better Letters31	
Edward C. Sterry 14	Metropolitan New York Section Following Page 34	
Collections Simon J. Worms 17	Business Anatomy Latham B. Myers 35	
Best Sources of Direct Mail Ideas William Wolfson 19	Sixteen Ways to Get Prospects Gene Lawrence 39	
Halftone Negatives Theodore S. Hiller 21	Lithographic Abstracts	
L. T. F. Starts New Training Program23	Charles B. Roth 51	
"In the Good Old Summer Time" James W. Hurlbut 24	Selling to Promote More Extensive Use of Photo-Lithography John J. Lutge 59	
Some Technical Questions and Answers 26	Conversion Table for Densities	
Official Organ of the National Association of Photo-Lithographers. Published by The Photo-Lithographer, Inc., 1776 Broadway, New York, N. Y. Advertising Rates: Advertising rates made known on application. Closing date for copy, twentieth of the month previous to date of issue.	Subscription Rates: \$3.00 per year in the United States, \$4.00 per year in Canada. Single copies 30 cents. Acceptance under the Act of June 5, 1934. Authorized November 14, 1935. Other publications issued: The Photo-Lithographer's Manual, priced at \$4.00 the copy.	



PEDIGREED OFFSET PAPERS

THE NORTHWEST PAPER COMPANY . CLOQUET, MINNESOTA

STRIFTE VERYWHERE! CHICAGO CLEVELAND DAYTON PHILADELPHIA K ANSAS CITY BALTIMORE NASHVILLE JACKSONVILLE

NEW ORLEANS MEXICO CITY

AND WHEREVER YOU ARE, THERE'S A BRANCH TO SERVE YOU

MAIN OFFICE AND FACTORY: CII WEST 120th ST., NEW YORK CITY

holds your a. The profitable catalogs and price lists

PRINTERS: The profitable catalogs and price lists

are the ones that sell more products for your customers.

And when the jobs you print sell more shoes, or der too.

And when the jobs you print sell more distinct of the repeat order too.

Printers today are adding the distinct advantages here

Printers today are adding the presswork. Thus the printers today are assumed to their own fine presswork. Thus the printers today are assumed to their own fine presswork. Thus the printers to a printer to the printing.

The salesman who knows to offer Wire-O sells more printing. It's worth the time to contact your nearest Wire-O Licensee.

The time to contact your nearest wire-O Licensee.

The time to contact your nearest wire-O Licensee.

MR. PRINTER:

See page 38 Your customers will be glad to hear this story from you.

Deston, Mess. Chicago, III. New York, N. Y. Newark, N. J. Chicago, III. New York, N. Y. W. E. Booth Co. Ltd.
British-American Tobacco Co., Ltd.
Broths Bank Note Co.
Brownell Photo Litho Co.
Brownell Photo Litho Co.
Brownell Photo Litho Co.
Brownell Photo Litho Co. Toronto, Canada Chine Springfield, Mass. Philadelphia, Pa. Detroit, Mich. Boston, Mass. Boston, Mass. Detroit, Mich. Toronto, Comada Rockford, III. Brooklyn, N. J. Cheago, III. Passoic, N. J. Cleveland, O. Boston, Mass. Chicago, III. Boston, Mass. Philodelphia, Pa. Baltimore, Md. Calvert Litho Co. Canadian Fine Color Co., Ltd. J. L. Clark Mfg. Co. Cansolidated Litho Carp. Consolidated Litho Corp.
Continental Can Co., Inc.
Continental Litho Co.
Contrinental Litho Co.
Court Square Press
Curt Teich & Co. Inc.
Allan B. Croke Co.
Crown Can Co.
Crown Can Co.
Crown Cork & Seal Co. Donaldson Litho Co. R. R. Donnelley & Sons Co. Duncan Litho. Co., Ltd. Dyment, Ltd. Newport, Ky. Chicago, III. Hamilton, Ont., Canada Toronto, Canada rords & Deutsch Litho Co. Epsen Litho Co. Erie Litho. & Printing Co. Washington, D. C. Boston, Mass. Federal Lithograph Company Forbes Litho. Manufacturing Co. A. L. Garber Co. Graphic Equipment & Mfg. Co. Grinnell Litho. Co., Inc. Gug!er Lithographic Co. Ashland, Ohio Philadelphia, Pa. New York, N. Y: Milwaukee, Wisc. Milwaukee, Wisc. New York, N. Y. Providence, R. I. New York, N. Y. Cincinnati, O. New York, N. Y. Honolului, Hawaii milton, Ont., Canada Chicago, Ill. Haass Litho. Co., Inc. The J. C. Hall Co. Hegeman Printing Co. Hegeman Printing Co. Hennegan Co. Hopp Press, Inc. Honolulu Litho Co., Ltd. Howell Litho. Co., Ltd. W. H. Hutchinson & Son, Inc. Industrial Litho. Co.
The International Printing Ink Corp.
The International Printing Ink Corp.
The International Printing Ink Corp.
Chicago, III. Jersey City Printing Co. Jersey City, N. J. Ketterlinus Lithographic Mfg. Co. Kindred-McLean Company Latham Lithe & Printing Co. Lithe. Plate Graining Co. of America Lithe Plate Grainers of Detroit Mahoney & Roese
Magill-Weinsheimer Co.
The McCell Company
Miller Lithographing Co., Ltd.
Morgan Lithograph Corp.
L. Mundet & Son New York City, N. Y. Chicago, III. Chicago, III. Daytan, Ohio Toronto, Canada Cleveland, Ohio Brooklyn, N. Y. L. Mundet & Son National Folding Box Co. National Litho. Co. National Offset Supply Co. National Process Co., Inc. Niogara Litho. Co. Nivison-Weiskopf Co. New Haven, Conn. Detroit, Mich. Kansas City, Mo. New York, N. Y. Buffolo, N. Y. Cincinnati, Ohic Oberly & Newell Offset Print & Litho, Limited Owens-Illinois Can Co. New York, N. Y. Toronto, Canada Baltimore, Md. ess Lithographic Co. oin Litho. Co., Inc. raphic Company of An dence Litho Co. Regenstein Corp., The The Reynolds & Reynolds C Roigh-Clark-Stone, Ltd. Rochester Folding Bax Co. Louis Rosech Co. Rusling Wood, Inc. olds Co Rusling Wood, Inc.
G. Schirmer (Inc.)
Schmidt Litho Co.
Theo. A. Schmidt Litho. Co.
Schmidt Press, Inc.
Schneider Press, Inc.
Schneider Press, Inc.
Schneider Press, Inc.
Schwobacher-Frey Co.
Sensfelder Litho. Stone Co.
Smyder & Black, Inc.
Spoulding-Moss Co.
Stecher-Troung Corp.
Stecher-Troung Corp.
Stroberdge Litho. Co.
Superior Plate Graining Co.
Sweeney Litho. Co., Inc.
The Infantry School (Book Shop)
Robt. Teller Sons & Dorner New York, N. Y.
San Francisco, Cal.
Chicago, Ill.
Cleveland, Ohio
New York, N. Y.
Philadelphia, Pa.
an Francisco, Calif. ston, Mass. ster, N. Y. isco, Calif. mati, Ohio tlyn, N. Y. ville, N. J. mning, Ga. Robt. Teller Sons & Dorner Tooker Litho. Co. Travelers Insurance Co., Ti New York, N. Y. New York, N. Y. Hortford, Conn. Graining & Litho Sup. Co ng & Litho Co. J. Weiner, Ltd. Western Lithograph Company Western Ptg. & Litho. Co. John Worley Co. London, England Los Angeles, Calif. Racine, Wisc. Boston, Mass. U. S. Dept. of Interior (Geological Survey) , Wash., D. C. U. S. Government (Aviation Field) Doyton, Ohio U. S. Government Printing Office Washington, D. C. Vermont Grovure & Litho. Corp. No. Bennington, Vt.

From A to Z

You'll find

ENTHUSIASTIC ZENITH USERS IN THIS LIST

—concerns that have found enthusiasm for Zenith, the modern litho plate grainer, extending from the graining department to the president — from the craftsman's pride in a fine piece of work to the president's appreciation of Zenith's help in increasing sales through more efficient production.

Because the commendatory letters we have received from lithographers would make a good sized book.—

Let Us Give You a Few Excerpts Just from the "S" Cheering Section

"After outfitting our Rochester plant with your graining machines and noticing the beautiful work we obtained from them, we decided to outfit our San Francisco factory with your Zenith Grainers, of which we have just installed two. . . They are certainly a revelation to our San Francisco factory in the amount of work they do and the quality of the grain which is perfect, and, as you know, the grain of the plate is the foundation of printing fine work by the off-set process. We are now 100% Zarkin Zenith Grainers in both our Rochester and San Francisco plants."

— STECHER-TRAUNG LITHOGRAPH CORPORATION

"Referring to your letter of January 27th, regarding the three Zenith Graining machines, which you installed for us, we are very pleased to advise you that these machines have been operating very satisfactorily, and the plates which they produce are of uniform quality. We also wish to thank you for the very fine service that you have given us on these machines. It is a pleasure for us to recommend these machines to anyone contemplating their purchase."

- THE STROBRIDGE LITHOGRAPHING CO.

"We have been using your Zenith graining machines since 1930 and we are pleased to say that we have found them entirely satisfactory. These machines are very smooth and quiet in operation, very efficient in the production of graining plates, and they have never caused us any delay the entire time we have had them. Through the use of the patented dumping devices we are able to consistently use steel marbles to better advantage, by putting them in the machine without scraping the plates. We are able to recommend your machine any time, as we consider it the best in the market."

-SCHMIDT LITHOGRAPH COMPANY.

Literature on Zenith equipment and rebuilt presses will be sent you on request.

ZARKIN MACHINE COMPANY, Inc.

Manufacturers of ZENITH

The Only Gearless Single Eccentric Graining Machine

335 East 27th Street

NEW YORK, N. Y.

Philadelphia, Pa.

A star performer!

SHIPS INCSS fine

Assures delicate time

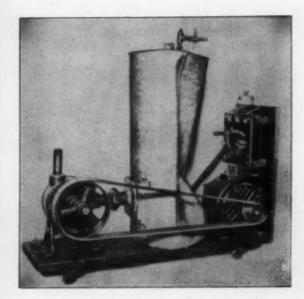
Controls damper-flow revents water trouble

EBONETE ROLLER "Be right with Ebonite

M. RAPPORT, President

Federal at Twenty-sixth St., CHICAGO,

Here's a Positive Vacuum That Shows Real Power!



The Machines That
"Take Up Their Own Wear"

LEIMAN BROS.
PATENTED... ROTARY POSITIVE

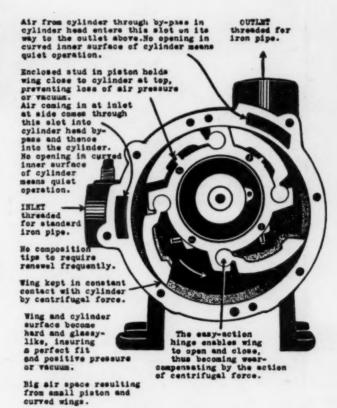
VACUUM PUMPS

also used for blowing

It will pay you to insist on having these pumps on your machines.

For use with vacuum printing frames, paper feeders, cartoning and packaging machines, and for all sorts of machines in the printing, binding, and paper industries.

—And here's the reason why you are sure of having positive service always:



GET THE FREE INFORMATION

LEIMAN BROS., INC. 110 CHRISTIE STREET, NEWARK, N. J.
MAKERS OF GOOD MACHINERY FOR 50 YEARS





INTO EVERY NEGATIVE ENTERS COPY—CRAFTSMANSHIP—CHEMICALS

The better the copy—the better the craftsmanship . . . the better the chemicals—the better the finished negative.

Merck Chemicals for the graphic arts field are *better* chemicals—the kind that go a long way toward promoting *better* results.

* MERCK & CO. Inc. Manufacturing Chemists RAHWAY, N. J. *

New York · Philadelphia · St. Louis · In Canada: Merck & Co. Ltd., Montreal · Toronto

THE

PHOTO-LITHOGRAPHER

Published in the Interests of Lithographers to Increase Sales, Efficiency and Quality

Volume VI

AUGUST, 1938

Number 8

A Few Reasons Why You Should Attend the N. A. P. L. Convention

I the coming N. A. P. L. Convention . . . or any business convention for that matter . . . meant just the passive absorption of knowledge imparted by scheduled speakers to the hundreds in attendance, it would be in order to wonder whether the same benefits might not be obtained just as readily from books, trade magazines, and sporadic contacts with salesmen and other lithographers in your community.

But there will be factors in the coming Sixth Annual N. A. P. L. Convention, just as there have been in all the other N. A. P. L. conventions, that will result in benefits to all those who attend that could not possibly be secured in any other way.

Get together four hundred or more earnest lithographers, all united in a close, common bond of interest in the same general subjects. Then, even without the benefit of carefully prepared programs, experts to direct the group clinics, and a place of meeting conducive to the most efficient, most comfortable conventioneering, there will occur spontaneously enough interchanges of knowledge and thought-provoking opinions to well repay everyone in attendance.

Add to the benefit of being one of such a large and representative group of lithographers the fact that all of their diverse viewpoints will be fused by intelligent guidance into practical plans and methods working towards the solution of many of the problems of the industry, and you should have enough reason for deciding that you just can't afford to stay away from the N. A. P. L. Convention.

"Book learning" is inclined to be empirical and dogmatic, whether it appears in trade magazines or actually in books. Often it represents the opinions of one person, based on his own experiences alone, and not corrected to scientific accuracy by careful check with the experiences of others in similar circumstances. Therefore it cannot possibly take the place of the many interchanges of opinion on all sorts of subjects of interest to lithographers that will occur constantly during the three days of the Convention.

Another valuable feature of the N. A. P. L. Convention . . . and of any other well-conducted business and industrial convention . . . will be the salubrious tonic of inspiration that will benefit every one who attends. Such inspiration comes, invariably, as a result of the magnetism of an assembly of people with common interests and objectives. It is an inspiration that can be ex-

perienced only when one becomes en rapport with a group of fellow craftsmen or business men in the same industry through actual contact and not through the slow, often uninspired, and isolated opinions that are made possible in other ways.

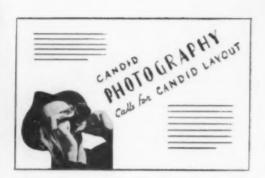
The three days you can spend at the N. A. P. L. Convention not only will result in invaluable accumulations of knowledge and inspiration, but they will give you perspectives on new ideas in the industry that may be worth plenty in dollars and cents when you are faced with the necessity of passing judgment on these new ideas, whether they may be concerned with new procedures or new equipment being considered for your own plant.

Make up your mind now that nothing will keep you away from the N. A. P. L. Convention. It is not such a hard job to delegate your routine duties to someone else for three days. It would be difficult ... if not impossible ... to get someone else to do your attending for you, with the expectation that you would receive even a fraction of the benefit that you will enjoy if you are actually a part of the Convention.

CANDID Layout

WILL HELP TO SELL YOUR PRODUCT

By EDWARD C. STERRY



YONTRARY to general belief, candid C photography is not new. The idea originated in France many years ago. But it took someone with a little showmanship to "bust" in with an "unusual" shot, wave the print in the air, and everybody thought he "had something." And right away the camera makers started in again to make miniature cameras (or minicams, if you wish), with ultra-fast lenses and high-speed emulsions. I say "again" because they were making miniatures "away back." I had a German make miniature in my hand the other day, which was at least twenty years old. And everyone remembers when Eastman brought out the Vest-pocket model. But apparently the "candid" shot was still in the germ.

In the world of typography and layout ten years ago we were passing through a "revolution." Typographic style was dormant at that time, so somebody had to "start something." Europe started it with a bang! Heavy black rules . . . verticals . . . angles all the way from north to scuth . . . up-side-downs . . . and everything else that meant little except to "start something." It did! American typefounders grabbed the idea . . . modified it (Thank God) . . . and the result . . . a new era in typography. This new era did at least two things. It created a "land office" business for the type founders, for new type faces sprang up like mushrooms, were sold,

used and discarded almost before the metal cooled off. The so-called revolution also created a new typographic style which was needed at the time.

It is traditional with the graphic arts that no new idea of major importance can exist long before its influence is felt

in other branches. The new school of thought both in photography and typography are now working together. Candid photography is demanding candid layout.

Webster gives us a definition for candid as "sincere," "frank," "impartial," "naive," "simple," "truthful." There is a certain style of typography and layout that can well be classed as frank, impartial, simple... to which I would like to add "sparkling," "spontaneous," with apologies to Webster.

However, this article is not for the purpose of particularly classifying such style, nor trying to make use of the word "candid" as applied to layout and typography as exemplified herein. The main purpose is to show the photo-lithographer that candid layout can be made profitable, and is a means by which his price can not be met fairly by competitive processes striving to produce equally attractive results.

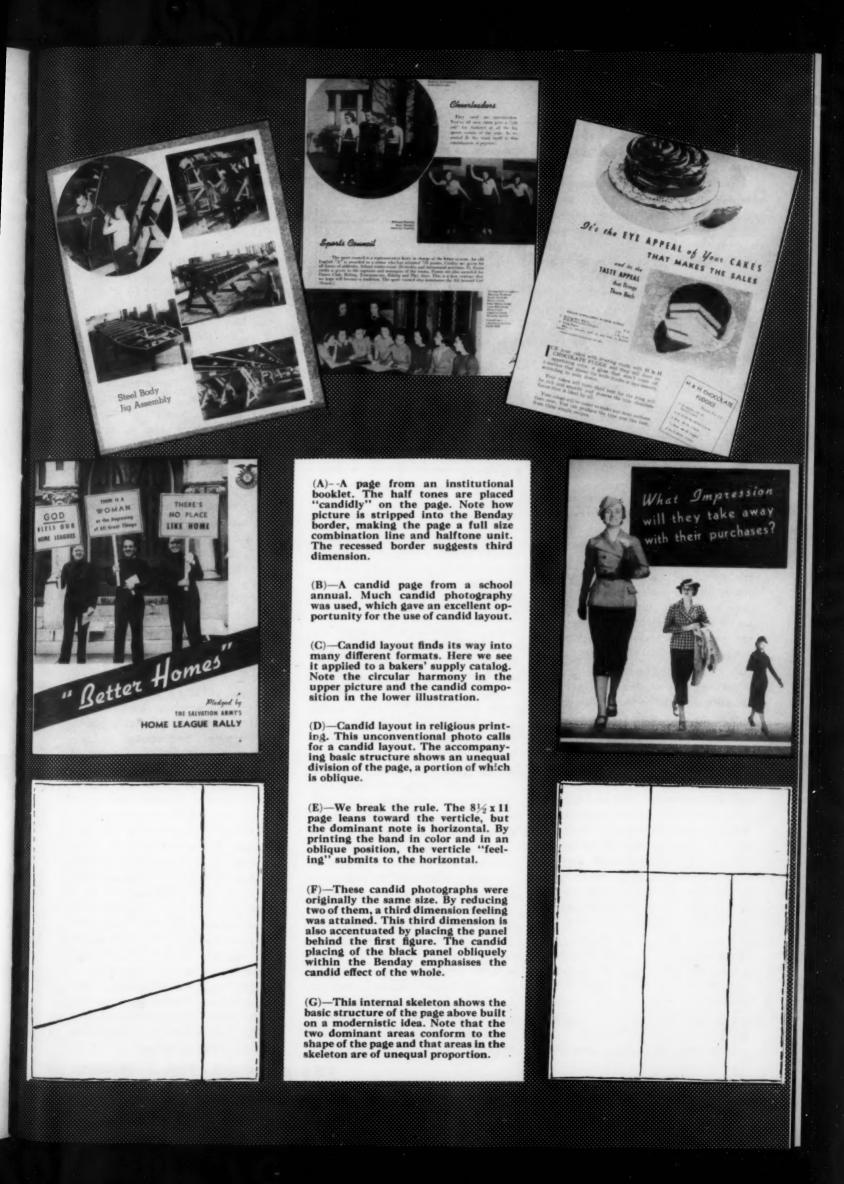
In previous articles, especially "Third Dimension in Layout" and "Sticking to Orthodox Rules in Modern Layouts," I laid stress on the necessity of adhering to certain fundamental rules of design in the basic structure of a layout. These principles still apply, and are equally important to the spontaneous or candid layout.

While photo-lithography is still thriving on the advantages of low price comparable with kindred processes, it is steadily being raised to a higher level of quality. As this standard improves, the price factor becomes less potent as such. Thus with the prices of competitive processes in the same brackets (or nearly so) photo-lithography is faced with the problem of competing almost solely in "eye-value" . . . attractive layout and typography plus quality production.

The candid layout, then, becomes one of the tools with which the photo-lithographer can still further lift the quality of his work a step higher and at the same time not raise his price to the level of competitive methods. Of course, I refer chiefly to illustrated advertising literature. This is not a hypothetical problem, but can be made an actual accomplishment as the accompanying layouts and explanations will show.

On the accompanying page is shown a reproduction from a sales visual. Cutting the halftones into the edge of the Benday border does three things. First, it gives a more interesting effect; second, it creates a feeling of third dimension, and lastly it forces competitive processes to figure on a full size combination line and halftone plate. Every page in this 24-page visual was built in this manner . . . each page was different, frank, candid, spontaneous, yet built on recognized principles of good design. Every page was built as a "combination line and halftone."

On the same page also is shown a candid page from a school annual. Many school books, as we well know, are produced on a price basis, which too often eliminates the use of Benday, reverses, tints, etc. Here again, offset comes into its own, and especially through the candid layout. Angles and "swing" structures in the candid layout know little or no price obstacles by offset. Lapping one picture over another calls for a minimum of extra work and produces the maximum effect. Captions and headings set at an angle or in vertical give compositors a headache and gets



them "out o' sorts" but the stripper whistles while he works on pages like these.

Candid layout and typography finds its greatest and most dynamic expression in the field of photolithography. It is another means whereby the photo-lithographer can lift himself out of competition with other processes and at the same time give his work a sparkle and power of attraction which by other methods would cost considerably more.

The basic idea of candid photography is a natural photograph in its raw state...just as the camera caught the subject... on the spur of the moment... unbiased... frank... candid. The basic structure of the candid, modernistic layout is also unbiased, frank. It is a structure of uneven proportions seemingly picked out of thin air.

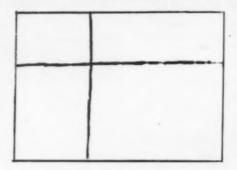
At this point I would like to inject an explanation. The word "modern" should not be confused with "modernistic" in terms of layout. Any professional layout built today is modern, of course. However, the format can be either editorial, classic or modernistic. Candid layout and typography finds its greatest expression in the modernistic style of format.

The modernistic layout falls into two classes or divisions. First, the spontaneous, in which the entire piece is built primarily on the layout structure or skeleton, with the illustrations being made to fit the layout, and the copy being written to fit the space designated.

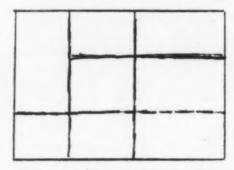
In the other style of layout, copy and illustrations are prepared first. It then becomes the layout man's job to whip the two elements into shape to produce an harmonious and attractive whole. Candid layout finds a ready expression in the spontaneous modernistic format because the foundation is deliberately laid down, seemingly without rhyme or reason.

For instance, we are building the inside spread of a 17 x 22 broadside selling the advantages of a certain pleasure resort. In a piece of this nature pictures should obviously dominate the layout. We are starting from scratch...from the layout...no photos are yet taken...no copy

written. We lay the skeleton spontaneously, in this manner:



Or it might be this:



At any rate it is a series or group of unequal areas. The only forethought given to this basic foundation is to maintain a certain shape harmony. If the sheet is horizontal the dominant areas should suggest a horizontal axis . . . or vertical as required.

With nothing to work on but our imagination we thus build a superstructure. In suggesting copy and illustrations for the various areas that same verticle or horizontal feeling should be maintained. However, it is a poor rule that is not elastic. If the finished piece is of a vertical shape and the general feeling is still vertical when viewed through the half-closed eyes there is nothing wrong in building a few areas of a different shape. Further, the basic skeleton whether vertical, horizontal or oblique, may be modified up to the point where it does not conflict with the balance of the layout. The dominant note in the layout structure should be in harmony with the general shape of the piece.

In conclusion. As previously mentioned and emphasized, the results attained by any printed piece depend first upon its attractive appearance, for if it fails to attract attention it fails to be read; if fails to be read, it fails to sell; and if it fails to sell it is worthless. There is no exception to

this. If the mission of a piece of advertising is not that of actually causing or influencing the sale of a tangible article, then it should sell the good will of the concern it represents. In any case it is selling, directly or indirectly, tangibly or otherwise. And going still-further: if the piece fails to sell then the advertiser experiences no returns which sooner or later means no profits with which to buy more advertising.

So it looks as though the problem rests on the shoulders of those responsible for the proper appearance and presentation of the customers advertising literature whether it be the advertiser himself, his advertising agency or the printer or photolithographer whom the advertiser makes responsible. In any case, the lithographer has a decided responsibility which is distinctly to his advantage to observe. He should offer his customers practical, timely and expert advice on layout and design. If he is working with an advertising agency, more intelligent co-operation can be offered if someone in the lithographer's organization knows layout. If the lithographer is working alone with the advertiser then he should surely feel responsible for the salesmanship built into the piece.

And last, though not least, the candid style of layout, as I have tried to point out, enables the photo-lithographer to be just a step ahead of competitive processes. It makes possible that intangible "something" in layout that other processes cannot attain except at much additional cost.

Fortunately, the photo-lithographic industry is not crying for a new era to put it on its feet. But it is crying for greater skill and ingenuity in the field of layout, style and design . . . printed salesmanship. Every piece of printed literature by what ever process, is intended to sell something. If such pieces are written, designed, and styled with the principles of salesmanship in the background, they cannot help but sell. If the photo-lithographer leaves no stone unmoved to see that his pieces are designed and produced to sell the product or service for the advertiser, then the industry will be lifted to a still more profitable position for all concerned.

COLLECTIONS By SIMON J. WORMS, Public Accountant

E ganization, whether large or small, in any type of profitable endeavor, is confronted by the problem of the collection of its outstanding accounts. These accounts may be uncollectible or delinquent in the matter of payment according to the terms of the invoice. There may be a possibility of collecting these items. Inversely, there are those uncollectible accounts which are absolutely impossible to collect and must be classified as bad debts. I shall attempt to discuss some of the causes for the appearance of bad debts in the accounts of a concern as well as the possible remedies for the partial elimination of this source of loss.

In modern usage, the greatest percentage of business is not done on a cash basis but is transacted on a credit basis. Credit, in itself, is really the confidence reposed in another individual that money, things of value, or rights of value advanced to this individual, will be repaid at some future determinable date. The question then arises as to what is the extent of this confidence. How much money or valuable rights or things may be advanced without fear of loss?

One can readily see that the human element will enter into these calculations as to the amount of credit or confidence which may be extended. The duty of extending this credit is imposed upon the credit department with its supervising credit manager.

The treatment of collections is an integral part of the conduct of a successful business, influenced by the other departments, and influencing them. Forethought, tact, and skill are to be applied to collections as much as to sales, management, or buying. A haphazard and irresolute policy, or that consists in nothing but a few schemes which may not be in keeping with the nature of the house, or which may even discredit the house, is very unwise.

What should be the goal of the credit man's endeavors? By what test should he measure his efficiency? Is it the percentage of losses from bad debts? How about the turnover of customers, the number of customers who bought last year, but whose names are not on the books this year? In place of every one of them, some new account must be solicited at a selling expense greater than would be required in selling a customer who had already bought from the house.

The strength of the credit man in collections and in decreasing the losses of bad debts is due to the facts that he can avoid selling to those customers who are most likely to prove delinquent; that he has many opportunities to educate customers in better habits of payment; and that his prestige is so great that customers are desirous to retain his goodwill. The credit man will base the extent of his credit grant upon the credit risk involved.

The credit risk is dependent upon the following factors: 1, The character of the debtor, which will signify the intensity of his desire to pay; 2, The capacity of the debtor, which will reflect his ability to hold or to get funds; 3, The capital of the debtor, which will indicate the extent and form of wealth which will insure payment; 4, Business conditions will aid or hinder the extension of credit.

The intelligent appraisal of the extent to which each of the above factors enter into a particular case, will enable the credit manager to properly refuse or extend credit. If this is correctly done, the collection of delinquent accounts as well as losses sustained by reason of bad debts, will be eliminated to a condegree. To properly siderable evaluate these factors, an investigation would be necessary at the time of receipt of an order. The scope of this investigation would be limited by the following elements: 1, Size

of the order; 2, Margin of profit; 3, Line of goods; 4, Probability of future business; 5, Hazard in the industry; 6, Credit standing as determined from outside sources.

Some of the sources of information for determining the credit standing of a customer are: 1, Mercantile agencies; 2, Banks; 3, Salesmen; 4, Attorneys; 5, Personal and trade investigations; 6, Trade associations; 7, Financial statements.

Naturally, the scope of each investigation varies and not all of the above sources of information need be utilized. However, if a full credit file is desired, all these sources should be used in order to determine the proper credit limit. The credit files should be revised periodically so that they will reflect the current standing of a customer.

The types of debtors might be generally classified into three classes. They might be classified as prompt pay, good but slow, and undesirable risks.

Those customers who can be classified as coming within the confines of the first group are those who habitually discount their invoices, or pay at maturity. The credit man should be very cautious in contacting these customers at any time because this class of customers is usually very sensitive to any actions or communications which affect their credit rating. This type of customer is easily affronted.

Those who are regarded as "good but slow" compose the second group. They may be careless about payments, or they may be willing but unable to pay because they are attempting too large a volume of business for their capital. They are delinquent but have no dishonest intentions. One cannot refuse to deal with this class, and yet there is the necessity of obtaining payment as promptly as possible. These customers are usually less sensitive than those of the first class.

The third group consists of those classed as the undesirable risk. This class might be composed of those who could pay if they would, and those who would pay if they could. Either the customer is thought to belong among the good but slow when the credit is extended, or some misfortune may have thrust the customer into this classification during the existence of the credit. It is desirable to discover as early as possible in the procedure whether the risk is really undesirable or uncertain, and then to determine whether the undesirability is caused by an unwillingness or an inability to pay. If the former, the creditor will proceed by the shortest method in his attempt to force payment. On the other hand, if convinced of the customer's inability to pay, the collector will resort promptly to such remedial or protective measures as are best suited to the situation.

Every collection manager will have to deal with apologies and excuses of customers for slow payments. Some of these reasons are:

- 1. The lack of a thorough understanding of terms.
 - 2. Inadequate capital.
- 3. Slow payments attributed to incompetence in management.
- 4. Difficult collections and uncollectible accounts may be the result of wilful neglect on the part of the purchaser. This class buy with the intent of getting more than that for which they had originally contracted.
- 5. Another reason which may be encountered is the inability to approve invoices and draw checks on time, because of the pressure of the buyer's office work or the inefficiency of his office and accounting system.

The collection problem should be analyzed and the collection policy determined in accordance with the marketing plan of the house. The class of customers sold will affect collection procedure and the collection record. The collection policy will be influenced considerably by competition. One house cannot adopt an unduly strict policy of prompt collections, unless it has something of a monopolistic field, especially if

its competitors are lax in enforcing terms. It will be found difficult for one house to overcome what may be a customary condition in the industry. With reference to the terms of sale, the real terms in an industry are not those used in quotations to the trade, but rather those terms used in payments by the trade. The terms under which a house sells are to be determined not by its quoted terms but rather by its collection turnover.

The collection turnover may be obtained by dividing the average receivables outstanding into the annual sales. The result will be the number of turnovers per year. Each turnover represents the fractional part of a year that the receivables are outstanding. Thus, if the annual sales of an organization were \$400,000 and the average receivables were \$40,000, there would be ten turnovers in the year or one-tenth of the year's business on the books at one time. One-tenth of 360 equals 36 days. Such a concern is collecting on a 36 day basis.

A systematic method of following collections is the best plan. The extent of this system will vary according to the size of the organization. An effective collection system will embody prompt action and follow-up at regular intervals, but with sufficient flexibility to meet different conditions as they arise. The collection department needs to take particular care that the monotony of its procedure does not in some measure destroy the collection efficiency. A good system, kept working, will go further than any other one thing to insure prompt collections.

The basis for the collection department's work is a list of the delinquent accounts submitted to it. This listing of the delinquencies should be submitted at least once a month. However, it may be submitted at more frequent intervals if the volume of accounts will justify it.

The methods for making collections may vary depending upon the scope of the activities and the size of the organization. However, a system which will include regular periodic follow-ups as well as forceful action where the occasion demands, should

aid considerably in the collection of delinquent accounts. Statements, letters, telephone calls, sight drafts, salesmen, attorneys, and collection agencies are all tools with which the collection department may work.

A graphical representation of the relation between sales and collections can be prepared month by month. This may also be kept year after year for purposes of comparison. The effect of new sales policies or collection methods or any steps bearing on the results shown in this graph should be noted carefully. It should be remembered that results of this character are not to be looked for too early after the new method has been installed. A chart with two lines, one for sales and one for collections, is kept by many executives, the proportion between the two being the important consideration.

In the broad sense, every member of the organization, whether president, salesman, bookkeeper, or department head, is interested in collections just as he is interested in sales. In the narrow sense, it may happen that a house has no officer entitled "collection manager" or that it applies the term "collections" only to the work of attorneys, agencies or collectors outside the house. Its own work of collection may be performed entirely by the credit department, statements and reminders being handled by the bookkeeper, ordinary letters by the assistant or territorial credit men, and special cases by the credit manager.

Credit is the mightiest force in business and collection is the goal of credit. Repeated sales, established customers, and satisfactory business are the goal of both.

Occasionally, one may hear the view expressed of selling on a cash basis and thereby eliminating the evil and expense of collections as well as the losses of uncollectible accounts. However, we must realize that the credit system is the distinguishing mark of our present era of civilization. To go to a cash basis would set back the clock by centuries. The work of collections is not to eliminate a vice, but perpetually to aid in distributing goods.



Photo Offset by

Everybody's Talking

ABOUT COPIFYER REPRODUCTION

Among advertisers the word is spreading that the Copifyer Lithograph Corporation offers the most modern and complete lithographing service in the middle west.

Advertisers have found Copifyer service flexible enough to meet all demands for high quality lithographing reproduction. Simple forms, direct mail pieces, broadsides, booklets, catalogs and displays—from black and white to full color—move continuously through the Copifyer plant and emerge as outstanding examples of what can be accomplished with lithography.

Most important of all, business men have discovered that the low cost of Copifyer reproduction makes it possible to step up sales results—advertising budgets go further, permitting mailing pieces to be made more colorful with a wider use of illustrations.

A steady and consistent growth in business—this summer the addition of new high speed presses, improved photography equipment and a new window display advertising department—these are ample proof that more and more advertisers are turning to Copifyer.

If you are not talking about Copifyer reproduction we will be glad to acquaint you with our diversified lithographing service.

THE COPIFYER LITHOGRAPH CORPORATION

FROST —— SCHAUMANN —— MYERS

BEST SOURCES OF DIRECT-MAIL IDEAS

By WILLIAM WOLFSON

THE ANSWER to the question inferred in the title could be put in one word—everywhere. The trouble is, that's laconic and altogether worthless for my purposes in the role of expounder. Nevertheless, it is a true answer—provided that the one who seeks is eager and sincere in his quest.

When imbued with this spirit of investigation, it would seem that invisible presences assist in remarkable ways. While gathering data I may open a book or magazine, and before my eyes is some material which I require; or someone I speak to talks about a phase of the very thing upon which I am engaged. Such experiences are too many to be regarded as coincidences. It so happens that the world is full of many things. They are present everywhere, yet do not exist for the individual indifferent to them. However, once the magnetic quality of interest is awakened, this interest attracts the attention to them.

Since "everywhere" is too extensive a territory to cover in this comparatively short exploitation, I must compress working principles. Therefore, these are presented to you in concentrated pellet form. Each must be dissolved by flowing your own thought waves over them. Thus treated, you, personally, will get more out of them.

Spatial Location of Direct-Mail

- (1) Right on your own premises;
- (2) On the premises of your customers:
- (3) On the premises of your prospects;
- (4) In all advertising media;
- (5) Elsewhere—wherever you chance to look.
- (1) Right on your own premises: Every job done by you for customers should be scrutinized. Of necessity, there must be a reason for the job; and it was given to you to accomplish a definite purpose. Find out what purpose. Then see what you can plan and devise to accomplish the results wanted. A series of folders? A book-

let or broadside? The format should be considered, but do not lose sight of the essential objective.

As a going concern, you receive mail. You interview callers. Make these sources for direct-mail ideas, too.

(2) On the premises of your customers: Look upon every call you make on customers as a follow-up in the search for direct-mail ideas helpful to each customer. Such calls enable you to ask questions, to acquire a greater understanding of needs and requirements. Please remember that you are not after offset jobs. You go beyond these; for your customer needs more business, greater profits, etc. Any direct-mail idea that appears to be able to secure such results will be welcomed by your customer.

(3) On the premises of your prospects: What was said of No. 2 holds true here. Permit me a further observation. As you delve for direct-mail ideas, to be applied against the fundamental needs of prospectives, be assured that when you are successful, business results for you; and that because of your further services, sepa-

rate and apart from mere production, the prospects converted into customers on that basis are yours to the end. No other house can get them away from you.

(4) In all advertising media: Study direct-mail pieces for suggestions. But endeavor to get more than suggestions out of them. Strive to improve on each piece. Here is an incidental hint—can any direct-mail piece, in its entirety or in part, be utilized by any customer or prospect? Maintain an idea file, a folder for each customer and prospect. In these file away possible, useable ideas.

There are plenty of ideas, too, in magazine and newspaper advertisements, billboards, displays. I will have something to say about application a little later.

(5) Elsewhere—wherever you chance to look: This fifth factor is given for the simple reason that direct-mail ideas are not confined to paper and ink. The universe is a vast storehouse of direct-mail ideas. You will find them in store-windows, in books, in speech and action. You need only to be alert.



This cartoon by Hurlbut puts the salesman in an heroic light (and often he deserves it) but it is purely allegorical. There is no intent to urge the photo-litho salesman to fight sales resistance, garbed in mail. The only mail he needs is direct-mail to pave the way!

The Principle of Adaptation or Reuse

Wherever you chance to look, there is something that can be reused in direct-mail form—something that can be adapted. Let us go on to some specific examples.

Suppose that you are reading a newspaper. You are through with perusal of the news, and determine to study the advertisements. If you have photo-offset equipment, you might scan these thinking of "blow-up" of ads, etc. The chances are, plenty of ideas will come to you. They have in the past! What you do with the ideas counts in the final analysis, not the fact that you had them.

However, to get on with our first example, turn again to the editorial section of the newspaper. We assume there is an "Inquiring Reporter" Column. The inquiring reporter is a chap equipped with a camera. He goes around, asks the same question of a number of citizens, snaps their pictures; and these photos are reproduced together with the individual answers to the question of the day.

You could devise a very effective direct-mail piece based upon the same plan. Do what the inquiring reporter does. Snap the pictures of five customers of your customer, report their answers to a few leading questions. Perhaps you can get Mr. Inquiring Reporter, himself, to handle the matter for you, and you have further ammunition for your direct-mail piece.

One company prepared a printed sales presentation the cover of which resembled the pictorial periodical, "Life." This was well planned, and proved exceptionally successful.

A chain of credit furniture stores secured remarkable results by means of a direct-mail piece in the form of a 12-page tabloid newspaper.

Direct-mail has one advantage over other advertising, and it is that of form. But the techniques of monoproduction are adhered to without thinking of further possibilities.

In our direct-mail ideas, we can refuse to accept the limitations of paper, type, cuts, presses. When the need arises, we can include tin and other metals, fabrics, the products of all arts and crafts. Such pieces are not excluded from the mails. When certain postage classifications are closed to us, there remain parcel post, the express companies, and other carriers.

Many direct-mail ideas can be gathered from observation. Observe, then, especially in fields where the attention of people is captured, where attention is held, and where action is incited.

For example, take this short list—worthy of serious study:

Exhibits, stationary and travelling; business shows, fairs; theatre and the movies; sports; demonstrations; street vendors and pitchmen; tricks of trades.

Take demonstration alone. I have seen new products launched through means of a single piece of demonstrative direct-mail. The list comprised but a few thousand names. Accounts were opened, repeat orders secured; and this without benefit of trade paper or other advertising, without calls by salesmen, and at a cost of approximately 50c per name.

Demonstration has many angles. Sometimes the simplest direct-mail idea will do the trick. Let us say you have a customer, a manufacturer of superfine roofing material. He sells through dealers throughout the country, but due to the fact that his product is high-priced, only about one hundred dealers out of a list of three thousand handle it. These dealers are very active.

A dealers' help devised by this customer of yours is a guarantee bond of long and satisfactory service, which is nicely lithographed. Whenever a property owner uses the manufacturer's material on his roof, the dealer notifies the maker and a bond is issued direct to the property owner.

Through inspection of your customer's letters produced in your shop, through questions asked on the premises of your customer, you know these facts. Here is how to utilize them in a demonstrative direct-mail idea:

Get the customer to have several thousand copies of each bond issued reproduced by photo-offset. These are enclosed in a filled-in multigraph letter to his complete list of prospective dealers. Thus is demonstrated the ready sale by active dealers, despite the higher price. And you get a constant flow of work because of this idea.

Strive for Leadership

A misshapen little gnome (Steinmetz), an absent-minded, genial and mild-tempered little man (Einstein) may be classified as leaders in their respective fields. Superior knowledge made them so. In business, too, we find outstanding characters.

But a business concern need not be the leader in the industry because it is made up of the lengthened shadow of one unusual individual. There are many owners, many executives, who are content to subjugate their own personalities, who are unstinted in their endeavors, in order that the company they serve might rear above competitors.

A desire for your plant to be among the leaders is a legitimate one. How to go on towards a happy consummation is the question. You need not cast envious eyes upon others—who are longer established, physically bigger, and wealthier. Take thought, and quietly accomplish results. Through your good works, gain a greater prestige, win the respect and the admiration of that group of people constituting your trade and your market.

Here are hints to help you:

How can you stamp your services or what it is you sell in a way that identifies it as singular, away and beyond a common competitive class dealing in service of a production nature?

The answer has already been given to you: direct-mail ideas helpful to customers and prospects.

Henry Ford stated: "There are experiments going on this minute in chemical laboratories, in shops, and in new kinds of business thinking, which are far more important to the future than all the experiments in government."

Why not begin a new kind of business thinking? Instead of thinking about how to beat out the other fellow through cutting prices, begin to think about direct-mail ideas.

Photo-Offset Camera Operations

HALF-TONE NEGATIVES

By THEODORE S. HILLER

By reverting our attention for a moment to the ideas expressed in the previous article entitled "Continuous Tone Copy for Half-tone Reproduction" we conclude that the successful camera operator follows definite methods and procedures in order that he may obtain the highest quality negatives from the copy submitted; that he also standardizes his operations in order that he, can determine which of the variable factors in the process is responsible for the losses he is experiencing in his negatives.

Although the equipment which the average camera operator is given to work with is often outmoded, if not worn out, and much more skill is required than he is given credit for, his negatives must possess the essential qualifications necessary to produce good press plates. Nevertheless, he should attempt to improve and repair those conditions so far as his time permits. For example:

(1) The leaves of the iris diaphragm should be so adjusted as to form a circular aperture. However, if the lens diaphragm is beyond repair a set of Waterhouse stops of correct size and shape (centers coinciding with the center of the lens) should be devised to replace the adjustable diaphragm.

(2) The screen should be aligned so as to be parallel to the sensitive medium at all adjustments.

All other screen bridges are adjusted in a similar manner.

(3) The stay flat should be flat, smooth, and tacky. It should take a position parallel to the ground glass focal plane of the camera and it must always replace the ground glass upon which the image was focussed.

The operator's working habits must be a continuous attempt to standardize his different operations by keeping records of his camera adjustments with each type of copy, also the screen settings, lens aperture, exposure duration and developing time on each negative until his experience with his equipment permits him to work according to his practical judgment. His written record can be used as a basis for the procedure on similar jobs. Remedies for poor results should also be recorded in conjunction with the possible cause of the difficulties, if these can be ascertained.

All of the operator's "time tried" methods should be referred to when each new job is developed. In this respect the following serves as an example:

The steps in making a half-tone negative do not have to follow any one given order nor is any change in procedure necessary if it differs from the one suggested. To the average operator this order is, first, Highlight exposure, second, Middletone exposure, third, Detail or Medium Shadow exposure and, fourth, Flash. Notwithstanding that the reverse is strongly adhered to by many operators, either method is permissible.

It was formerly considered essential to overcome the inertia of the sensitive material by exerting flash exposure first for the purpose of building up a dot and, also, to allow for the low actinism of the arc lamps. Although all sensitive media possesses inertia the total exposure duration (usually over-exposure in contrast negatives) does eliminate any effects of it.

The optical factors involved in half-tone negative production require considerable study and application before much emphasis is placed on the manner in which an exposure is made. Those factors include copy distance, camera extension, lens apertures, and the method of determining their size and screen separation.

Screen separation seems to be the variable which induces more controversial discussions than any of the other factors.

Generally, it is recommended that a set screen distance be arrived at for a given screen ruling. This contention is proclaimed because a screen possesses characteristics similar to those of a lens.

It is further contended that the screen placed at any setting than at the exact focal point causes the resulting dots to possess a certain amount of unsharpness similar to that of a line image which is photographed with a lens unsharply focussed. However, the grain character of the metallic silver on the negative and the results of controlling exposure time and developing time provide some latitude for the various screen positions and overcome much of the fuzziness of the dot formation. Unless the apertures of the lens are exceedingly large for the screen distance and the exposures are exceedingly long, the negative dots are satisfactory. Short screen distances can usually be considered most workable with large lens apertures and greater screen distances with small lens apertures.

When the screen is placed beyond the maximum distance the effect of the screen gratings is lost and the highlights and shadows become overexposed.

With the screen at a minimum distance from the sensitive medium, e.g., with the cleats of the screen bridge in contact with the sensitive medium, the screen gratings produce a checkerboard effect with normal exposures.

Perhaps the most simple method of half-tone screening and one which can be used under any circumstances follows the general procedure which Stephen Horgan devised. It can be outlined as follows:

1. Focus the copy for size and sharpness.

2. Adjust the screen by using the middletone stop and by viewing the dot formation on the ground glass or the clear parallax focusing circle. The dots should show a connection at each corner with the adjacent dots; the heavier the connection between the corners of the dots the shorter the screen separation.

3. By using the same stops for all enlargements and reductions proceed with the highlight exposure, F/22 aperture. The middletone exposure is made with an F/32 aperture and the detail or medium shadow is made with the F/45 aperture. Usually the F/64 lens aperture is used for the flash, but sometimes the F/90 produces a smaller dot.

4. Any number of exposure ratios are in use with this system. For photo-offset negatives on orthochromatic film a common ratio is 1-6-4-2 with 35 ampere arc lamps at 36 inches from the center of the copy and adjusted to 30° to the lens axis. The above ratio is subject to variations and may be altered with any copy or size of reproduction.

This system has been adopted with slight differences by the manufacturers of the Douthitt Diaphragm Control System.

The simplicity of this method of half-toning and the fact that it is universally applicable make it very useful. The three exposures and flash at one screen separation tend to overcome the deficiencies of a single exposure and flash and thus produce quite a satisfactory half-tone negative.

The dot opacity is controlled by adjusting the duration of exposure and correctly determining the general ratio of the combined exposures with the different apertures. This method is also quite satisfactory because of the tonal latitude which an average offset negative must subtend.

The offset negative must be comprised of more than a simple screen grating with an average amount of detail. It must possess the following characteristics:

1. Opaque dots of correct size to represent the correct tones on the offset paper after passing through the press.

2. Sufficient opacity to allow for proper press plate preparation.

3. Detail throughout the tonal gradations, especially in the shadows.

4. A shadow dot which will not allow "filling in" on the press plate.

5. Highlights which will reproduce as half-tone highlights (in proper balance with the other tones of the reproduced image) on the offset paper.

Because the tones of a contrast negative (photo-offset) are represented by variations in dot size and these variations in dot size are the result of (1) proper screen separations, (2) stop sizes, (3) correct exposures, it is generally recommended that the contrast of the negative be controlled by the proper choice of the stop size and an increase or decreased exposure.

More Than Two Million Colorsl



Those customers of photo-lithographers who are inclined to designate a second color to be used by saying, "Oh, make it any color just so it's red!" might be impressed with the fact that they are missing a few bets in the use of color if their attention is called to this device—the photo-electric spectrophotometer, a new instrument which can actually distinguish more than two million colors.

The spectrophotometer shown above is installed in the Research Laboratories of The International Printing Ink Corporation. Contrast in negatives is the range of tonal difference between the high-lights and the shadows. The more contrasty negative is judged by the difference between the high key of the highlights (or the smaller transparent dots of the negative) as differentiated from the low key of the shadows or the large transparent or small opaque dots on the shadow areas.

The copy, of course, has a definite influence on the tonal range of the negative, nevertheless this character of the copy can be accentuated or diminished by controlling the highlight and the detail exposures. Although it is known that the flash operation should not exceed in affecting the dot size, but merely increase the opacity of the dot at its core, sometimes the flash exposure tends to produce screeniness and as a consequence decreases the contrast and the detail definition of the negative.

The key of the shadow tones of the copy indicates the amount of light it will absorb and the amount it will reflect during a given exposure. That is, the lower the key of the copy the greater the absorption of the actinic light and the weaker the resulting ghostlike dots formed during the principal exposures. Therefore, the copy of extremely low key which is to be reproduced mechanically must be adequately exposed for the shadow detail and the amount of flash must be judged (1) with relation to the amount of light reflected during the principal exposures and the net result of exposed sensitive silver salt on the negative medium, (2) with relation to the flash stop size, (3) with relation to the amount of light reflected by the flash sheet.

The amount of light reflected depends upon the strength of the illumination propagated by the arc lamps and upon the absorbing quality of the surface of the flash sheet. Because these variable factors are seldom of equal value for any number of conditions, the statement generally made "that the flash exposure bears a definite 3% ratio to the principal exposures or to the middletone exposure" is very impractical.

Owing to the general requirements of the offset method of printing, the negative must possess sufficient dot opacity and size in the shadows to withstand any tendency to "fill in" on the press plate and become a solid. The size of the opaque shadow dot on the negative, however, must not be abnormally large, as a result of the flash exposure, as this tends to flatten the resulting print and produce a loss of detail which is tremendously important in the reproduction of any original by the photolithographic process.

The most practical suggestion which can be made to determine the correct flashing procedure would include the following steps:

1. Make a trial negative using a flash sheet as copy and using the usual type of sensitive medium employed for half-tone production without the principal exposures, but using the flash sheet alone. The first negative should be made using:

a. F/64 aperture and allowing a section of the negative to be exposed at a time, e.g., 20 seconds, 30 seconds, 40 seconds, 50 seconds and 60 seconds, etc.

b. F/90 aperture, for another exposure follow the same procedure as for the above trial but increase the exposures.

2. Develop the negatives for a normal developing time at standard temperature. Judge the correct dot size of each negative in comparison to the dot formed from a normal copy. The exposure and stop size arrived at should then be tested with a normal copy and the type of flash dot received should be judged for its correct size and opacity. Assuming that the opaque shadow dot is abnormally large and the negative appears flat, it can be readily concluded that the exposure duration was too long.

Make Up Your Mind

now that you will attend the 6th Annual Convention of the N.A.P.L., Wardman Park Hotel, Washington, D. C., October 6, 7, 8. Interesting and instructive programs are being arranged to make every day a profitable one for you.

L. T. F. Starts New Training Program

F. G. Seulberger has joined the educational staff of the Lithographic Technical Foundation as Assistant Educational Director.

Mr. Seulberger was graduated from the College of Engineering and Commerce of the University of Cincinnati in 1925. He comes to the Foundation after seven years as a member of the faculty of Drexel Institute of Technology, Philadelphia.

As assistant to Dr. MacDonald, Mr. Seulberger will have immediate supervision of a new educational development in the Foundation. The growing need for chemists throughout the lithographic industry has prompted the inauguration of a new training program. A class limited to twentyfive chemical engineering graduates will be selected for a ten weeks' intensive training course in the Lithographic Department of the New York Trade School. Each man will be sponsored by a lithographing company, and will enter the shop of that organization upon completion of the course. A number of firms have already agreed to take advantage of this opportunity to secure technically trained personnel.

This new plan is the idea of Alfred B. Rode, president of Lithographic Technical Foundation, and was announced by him in his talk at the recent Lithographers National Association Convention.

The following excerpts are from a L. T. F. folder describing the new program:

"One of the greatest needs in the lithographic industry today is technically-trained executives—and this need is increasing. The type of executive referred to is one who will not only run your plant smoothly and efficiently, but will also have

"I. Such knowledge of and interest in economic and technical developments in industry as a whole as will enable him to plan and carry out corresponding developments in *your* business.

"2. A training in engineering and technology which will enable him to apply scientific and engineering principles in improving *your* methods and in solving *your* problems.

"The difficulty is, of course, how to secure this type of executive. The finished product is rarely available because he has already made himself invaluable where he is. On the other hand, the logical raw material—the young graduate chemist or engineer—faces a difficult situation if he comes into your organization without previous knowledge of lithographic methods and practices.

"To help solve this problem the Lithographic Technical Foundation proposes to train a group of promising university graduates in the fundamentals of modern lithography. . .

"This plan . . . is similar to one that has been in operation in certain large industries for many years. The General Electric Company, Boeing Aircraft Corporation, the Bell Telephone Company, and others maintain training schools in which selected college graduates are taught the fundamentals of their business before being inducted into actual production, technical, or sales operations.

"The first session of the proposed course is scheduled to start next September."

A Bedtime Story

ALL his long life John D. Rockefeller refused to go to sleep until he had spent ten minutes in what he called his "review." During those ten minutes he reviewed the acts of the day, and tried to find out what he did wrong, what he did right, how he could correct the wrong things and perpetuate the right ones.

Inspired by this example, a fine salesman I know spends his last ten minutes every night going over his sales contacts during the day. Some he sold. Some he failed to sell. Why did he sell? Why did he fail? He relives each one of those interviews, and mercilessly picks himself to pieces, and resolutely endeavors to correct his errors.

I do not know of another salesman whose method is more faultless, whose success is more certain.

Charles B. Roth

"IN THE GOOD OLD SUMMER TIME"

By JAMES W. HURLBUT

Director of Publicity, Radio Station WJSV

Washington, D. C.

THE "good old summer time" is here again and most lithographers, as well as almost everybody else in the reproduction business, are sitting around mopping overheated brows and wishing the last of September would arrive with the fall business

There's no doubt that the summer months are not the busiest in the year for the lithographer, but the thought strikes me that inasmuch as everyone has the same idea about hibernating until September, it might just be that some enterprising fellow is going to put on his thinking cap and round up enough stray work to stay well on the credit side of the ledger. There must be some business—there just aren't enough golf courses and swimming pools for everybody to knock off and play.

And speaking of golf courses gives me an idea. I played a public course here in Washington last Saturday and had to wait two hours before I got on the first tee. I asked the caddy master how many people played the course on an average Saturday and he estimated three thousand on the four nines in operation.

Dividing by foursomes gives 750 and adding two fifty for a lot of twosomes and threesomes gives a thousand score cards. Assuming that Sunday is at least as heavily trafficked as Saturday and taking a modest quarter for the five week days means that something like 3,500 score cards are used every week on that one course alone. The cards are on 4 x 6" in one color on both sides of a light cover stock, but they add up. There are five public courses and a dozen or so private links in and around Washington. It's business that's worth going after in the dog days or any other time.

Golf makes me think of sports in general and that in turn reminds me of the new promotion brochure which the Columbia Broadcasting System has recently released entitled "Sports from Columbia." It's the most handsome and effective presentation I've seen in months. It's offset in four colors on twenty 10½ x 14" pages of bulky white offset stock with a heavy cover stock to match. The cover bleeds on four sides and most of the inside pages bleed on at least one edge.

The text concerns the exclusive sports coverage of CBS, illustrated with amusing color sketches. The separate subjects are titled "Stroke ... Serve ... Swing ... Stretch ... Stride ... Strike ... Sprint ... and Scrimmage," which are easily translated into Rowing ... Tennis ... Golf ... Horse Racing ... Polo ... Baseball ... Track ... and Football.

Radio broadcasters, incidentally, used to think of the summer time as a period when radio stations stayed on the air more or less just to kill time—no commercial business and not very much audience. Some bright boys figured differently, however, and with a lot of promotion of the type described above and a quantity of hard work have transformed the radio summer into a season which stands up well from a commercial and audience standpoint.

Promotion, it seems to me, is something that applies to the lithographer as well as to his customers. If the work is running slow and gallery, presses, plate department, and what not are sometimes standing idle, why not utilize the time to get a snappy direct mail campaign into print?

If you've got a good art department and someone on the staff who has a flair for promotion ideas, you might just as well keep the work inside the plant, but in any case there's no harm in calling in one of your advertising agency accounts for help. Perhaps a deal could be worked out whereby the agency would prepare your promotion for the presses and you would lithograph the copy for their campaign—we hear a lot about reciprocity these days.

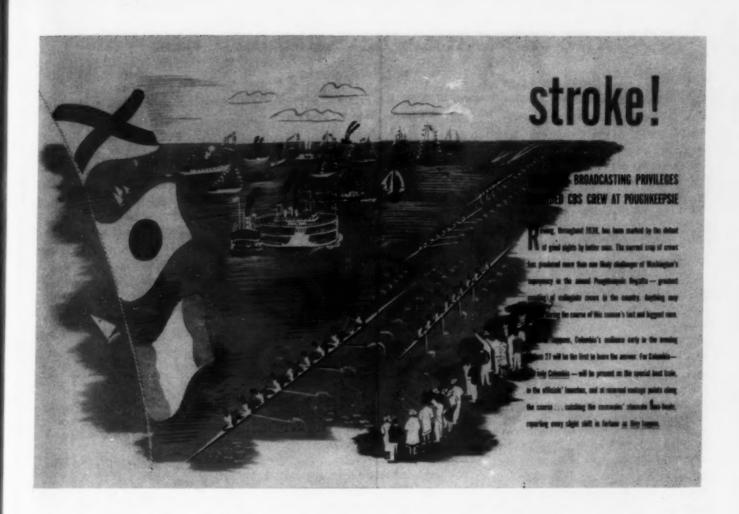
If you don't have an agency account this might be a good way to acquire one.

One direct mail piece a month to a live mailing list will serve two purposes. Each month a different phase of the service of lithography can be stressed and each mailer will serve as an example of the work produced by lithography.

There is, naturally, a lot of latitude in the term "promotion" even as it applies to direct mail campaigns which can be produced by the lithographer. A piece may be simple black and white on 20 pound sulphite, or it may be a multi-page, process color job on fancy offset stock. There's just one important point to keep in mind—if it doesn't "promote," it's worthless!

A promotion piece is no more than a printed salesman which leaves your plant in its best clothes to call on your hottest prospects and steadiest customers to proclaim the advantages of the company it represents. A salesman, even a printed one, with his tie under his ear, his suit unpressed, his shoes not shined, and a two day beard is not going to create a good impression. So whatever you send out, even if it's only a five line message on a government postcard, be sure it's the best in its class. A boozy bum selling razor blades on the corner and a shoddy direct mail piece are in the same class-you wouldn't hire one, so don't employ the other. They do more harm than good.

Lithography has one great advantage over other methods of reproductions. Pictures—line, half-tone, or benday—may be used liberally at a fraction of the cost of other methods. Pictures—and charts and graphs may be included in that category—tell a story simply and directly. They make a direct impression of greater impact than the same amount of type space. The CBS brochure, "Sports From Columbia," is about eighty percent illustration and twenty



This is a typical spread from the brochure, "Sports from Columbia," published by the Columbia Broadcasting System, Inc. It was lithographed by Crafton Graphic Company, New York, under the supervision of Howard J. Katz. Evidence of Columbia's satisfaction with the job is contained, partly, in the following excerpt from a commendatory letter sent to Mr. Katz by Victor M. Ratner, Columbia's Director of Sales Promotion:

"The job was the most intricate production job we have attempted . . . you gave us a finished booklet which shows no evidence of having been turned out on the run and in bad offset weather, nor was there any evidence of the plate difficulties imposed by the complicated art work. In fact, the finished printing job looked better than the original art work. . . . "

percent text and it packs a terrific punch. Use this fact in producing the material which you present to others; build at least a part of your campaign around the economy of pictures in the lithographic process. In one piece use black and white line drawings. In the next try black and white line with "splashes" of flat color. A third might employ benday tints and flat colors. The fourth in the series might be the "dude" of the lot with process color on fancy stock.

Don't be too solemn in your message. A light touch goes well in any kind of weather. A direct mailer, no matter how much it costs, which runs on interminably with line after line of dull statistics and dry-as-dust facts is going to land in the waste-

basket, while a bright, concise little caller has a better than even chance of staying on the desk.

The New York Daily News conducted an extensive direct mail promotion campaign under the intriguing title "Tell It To Sweeney." The series, consisting of sixteen page booklets with humorous drawings in full color and flashily colored charts. presented circulation facts concerning New York's five boroughs as applied to the News for the benefit of prospective advertisers. There is probably nothing more stodgy than straight statistics, but the News booklets not only stayed out of the waste-basket but found a place of honor on the advertiser's book shelves. Why? Because they were funny as well as factual. The illustrations were amusing and the text struck a humorous vein that made the dry facts as easy to take as sugar-coated pills.

Incidentally, the summer has become an increasingly popular time for the distribution of promotional material in many other industries than radio and lithography. Trade Associations, canned goods manufacturers, resorts (winter and summer), schools, brewers, colleges, distillers, and a host of others are either sending out material already or are in a receptive frame of mind to be sold a direct mail promotion campaign by an alert lithographic salesman who saves the golf courses and the bathing beaches for the week-end.

SOME TECHNICAL QUESTIONS AND ANSWERS

A Lithographer recently submitted some questions raised by parts of the text in The Photo-Lithographers Manual and by his own experience with various formulas. The following publication of his questions and the answers, supplied by a competent lithographic technician, may be helpful to other subscribers.

Question 1: I would like a little clearer explanation of the method of making a positive from a negative as you have written on page 183 in your book "The Photo-Lithographer's Manual." I would appreciate a formula to go by, otherwise it is a case of considerable experimental work to produce the desired results:

Answer: This method of reversing is carried on with autochrome plates and the formula is as follows:

Water 35 ozs.
Potassium Permanganate 30 grains
Sulphuric Acid 66° 3 drams

After development has been completed, wash the negative completely and slip it into a tray of the above solution. Take the tray out into white light, and bleach for thirty to forty seconds, or until the silver image has disappeared completely. Redevelop in used developer.

Question 2: I am looking for a developer that will not deteriorate as rapidly as . . . This developer does not last, and when exposed to air it turns brown very rapidly. Perhaps you have had complaints of this kind before. Maybe I don't mix the formula correctly. Can you suggest something?

Answer:

Water (not over 125° F.)	64	ozs.
Hydroquinone	41/2	ozs.
Sodium Sulphite	73/4	ozs.
Sodium Carbonate (Mono-		

hydrous)	101/2	ozs.
Citric Acid	3/4	ozs.
Potassium Bromide	13/4	ozs.
Water cold to make	1	gal.

Dissolve the chemicals in the order

given, use the solution full strength, 3 minutes, at 65°-70° F.

Water 125° F.	64	ozs.
Potassium Metabisulphite	1	oz.
Sodium Sulphite	4	ozs.
Hydroquinone	31/2	ozs.
Sodium Carbonate	8	ozs.
Citric Acid (crystals)	75	grains
Potassium Bromide		grains

Use full strength 2-3 minutes at 65°-70° F.

Question 3: What do you think of the formula for the following developer for film?

A. 1 qt. of hot water, plus 1 oz. of Sodium Sulphite, plus 2½ ozs. of Hydroquinone, plus 30 grains of Citric Acid.

B. 1 qt. of hot water, plus 5 ozs. of Sodium Sulphite, add A to B.

C. 1 qt. of hot water plus 5 ozs. of Potassium Carbonate.

D. 1 qt. of hot water, plus 5 ozs. of Potassium Carbonate plus 150 grains of Potassium Bromide add C.D. to A.B.

Answer: This formula seems satisfactory.

Question 4: Would it be possible to substitute Sodium Carbonate for Potassium Carbonate in this formula? How much more or less would be required?

Answer: Yes, it would be possible to substitute 5 oz. 18 grains of Sodium Carbonate.

Question 5: To intensify I use the regular wet plate chemicals—copper to bleach, then silver to intensify (I notice a faint fog after silver), then Sodium Sulphide to blacken. This causes a heavy red stain to form over the whole negative. The density is perfect but the red stain is very objectionable. Can I subsitute another chemical in place of Sodium Sulphide? I have tried Sodium Sulphite and Ammonia but the density is lacking.

Answer: The intensifying chemicals which are mentioned are not used on film. The following chemicals are used if intensification is necessary.

Monkhoven's Intensifier

Water	16 ozs.
Potassium Bromide	3/4 oz.
Mercuric Chloride	3/4 oz.

After fixing the negative, wash it thoroughly for ten minutes, bleach it to a creamy white color in the above solution and wash 15-20 minutes. Blacken in 5% solution of Sodium Sulphite or in a used developer.

Question 6: You give exposure times for wet plate half-tones on page 185 for different types of copy—now I know you don't like to be pinned down to figures and I am also aware of the large variety of equipment in use.

Answer: If light conditions are normal, these exposures will be about right. However, in some cases the exposures are short. Try for same size reproduction 133 line screen 5/16 screen distance, 24 inch Focal length:

Highlight F/16-F/22 halfway between 16 and 22, 35 seconds.

Middletone F/22-F/32, 2 minutes. Shadow F/32-F/45, 1 minute. Flash F/64, 50 seconds.

Question 7: Would you please give me the approximate screen separations for the 85, 120, 133, 150 line screens?

Answer:

85 Screen	120 Screen	133 Screen	Screen
39	19	5	3.
_	-	-	
64	64	16	16

Question 8: With the stops I use I cannot produce a satisfactory negative without doubling the exposure time you give. I leave the flash exposure and the developer time the same as you suggest. What strength developer do you suggest? I use 28 degree hydrometer test.

Answer: If Iron Sulphate is used for the developer for wet plate, the solution should read 21° specific gravity.

In Your Shop

KODALITH means

Higher Production at Lower Cost

NO matter what the job, there's a type of Kodalith Film to handle it perfectly. Kodalith is exceptionally easy to use, is ready for the camera just as it comes from the package. You can rely on the high uniformity of every sheet, because the delicate balance of the emulsion is closely controlled in a plant devoted exclusively to photographic manufacture. All Kodalith Films are on safety base.

KODALITH REGULAR FILM

A modern material of unsurpassed uniformity, for average black-and-white work-jobs that demand economical, fast, efficient production.

KODALITH ORTHOCHROMATIC FILM

Specially adapted to fine line and halftone work from colored or stained copy.

KODALITH HALFTONE FILM

Made expressly for dot etching. Has a longer scale emulsion. Recommended for copy that calls for highest-grade halftone qualities.



EASTMAN KODAK COMPANY Graphic Arts Dept.

Rochester, N. Y.

MIRAC PLATE BASE SOLUTION

is another step forward in the scientific development of the lithographic art. Based on the peculiar desensitizing properties of gum arabic, which excel those of any other chemical or combination of chemicals used in lithography, it is backed by the emphatic conclusions of modern research.

While it is not an etch in the accepted sense of the word, it so thoroughly desensitizes the bare metal parts of a lithographic plate that they become receptive to water and repellent to ink in a remarkable degree.

Easy to use, equally fine results may be obtained with aluminum, zinc or stone, and it can be employed on any type of photomechanical or hand transfer plate.

In combination with the MIRAC WATER FOUNTAIN SOLUTIONS, which are manufactured for use in conjunction with the MIRAC PLATE BASE SOLUTION, here is a perfect auxiliary to the production of the highest quality work.

THE FUCHS & LANG MFG. CO.

(ESTABLISHED 1870)

DIVISION . GENERAL PRINTING INK CORPORATION

100 SIXTH AVENUE » NEW YORK, N. Y.

BOSTON • CHICAGO • CLEVELAND • CINCINNATI • FORT WORTH
PHILADELPHIA • ST. LOUIS • SAN FRANCISCO • LOS ANGELES

CANADIAN OFFICE: 176 JOHN STREET, TORONTO, ONTARIO

RETAILERS FOLLOW THE CROWD

By WILLIAM ROBINS

THE display lithographer who would plan display campaigns in terms of circulation and market coverage will serve advertisers best.

Rather than merely paper, metal, ink, and a price for the combination, he will discuss retailers, location, circulation, and adequate coverage at minimum cost per quantity of installed displays.

Digest the following simple, basic principles declared by three pioneer studies, which are sponsored by all advertising and marketing authorities as competent guides. They are first principles in following the crowd with displays.

1. "Retail trade in a metropolitan center tends to be segregated into distinct forms of retail development: central shopping district, mid-city shopping district; and outlying shopping district."

2. "The space distribution of retail trade always assumes a pattern that is not unlike the space distribution of traffic flow."

Expressed in simpler terms: Volume sales of retail stores corresponds to volume of traffic flow at these stores.

3. The National Window Display Survey, a much more extensive study than the first quoted, makes this breakdown of each city:

"Central business district."

"Secondary business district."

"Neighborhood business district."

"Outlying business district."

Accepted by all of the major associated groups of advertisers, agencies, and window display manufacturers and installers, the four business districts just enumerated are given their market, or trade, characteristics, as they have been observed and checked in 19 cities and

towns of all sizes of population in all parts of the country.

Central Business District

Shopping goods primarily.

Represents the business heart of the city.

There are more retail stores doing a greater volume of business both individually and collectively.

Large department stores, numerous women's and men's clothing stores, furniture, shoes, jewelry stores.

Unimportant sprinkling of "convenience goods" retailers.

Draws customers from all parts of the city proper.

From outlying suburbs.

All means of intra-city transportation are focused on this district.

Has a negligible resident population.

Usually contains a combination of large volumes of all classes of traffic.

A force of attraction upon the majority of any population.

Secondary Business District

Shopping goods and convenience goods.

Opportunities for shopping goods outlets such as department stores, shoe, jewelry, furniture, with some convenience goods stores.

Do not draw customers from all parts of the city, but must attract them from considerable distances to develop as important trading districts.

Frequently attract trade from long distances.

Grow at convergence of major traffic and transportation routes.

Depend on customers from a wide area of dense population.

Small but numerous stores.

Sales are more in direct relation to buying power than elsewhere in the city.

Population is greatest controlling factor in determining retail structure.

Most diverse in form of retail developments within it.

Extreme traffic congestion in the central business district favors development of district catering to shopping needs of outlying popula-

Pedestrian traffic increased by passengers of mass and vehicular transportation.

Neighborhood Business District

Convenience goods.

String business streets.

Along major traffic arteries.

For the most part attracts customers within easy walking distance. Comprise more or less continuous rows of grocers, meat markets, fruit and vegetable stores, drug and other convenience goods outless

Only a few shopping stores.

Business streets have developed in these districts.

Spread over the residential portions of the city by following principal mass transportation routes.

Such streets form a continuous network.

Outlying Business District

Convenience goods.

Least significant type of business district.

Usually comprise two or more complementary rather than convenience type stores.

Supply the immediate wants of resident families located within easy walking distance.

Most frequently develop in the sparsely settled fringes of the city. Some such clusters result from rigid zoning regulation within densely populated residential areas. Composed of residential and sometimes industrial areas.

Retail outlets occur as single isolated and very small groups.

Almost entirely convenience goods stores.

As retailers follow the crowd, so display advertisers will follow the retailers who sell their products, or should be selling them.

Treasure Island chooses HAMMERMILL OFFSET

to invite 20 Million Visitors



TREASURE ISLAND . . . largest man-made island . site of the 1939 Golden Gate in the world International Exposition on San Francisco Bay.

FOR the artist's views to advertise next year's Golden Gate International Exposition in San Francisco, officials wanted fine reproduction at reasonable cost-so they chose Hammermill Offset.

Your customers, too, look for faithful printing results at moderate cost. Hammermill Offset will go a long way to help you satisfy them with sharp, brilliant printing. These clearer impressions are easy to produce because the ink stays on the top of this well-closed, compact, surface-sized sheet.

You can profit with Hammermill Offset. Its lint- and fuzz-free surface saves press time. When it is used there is less time out for washups and less danger of ruined plates and blankets.

Hammermill Offset gives you more accurate press register in winter or summer.

Every Hammermill paper machine is equipped with electronic control of the moisture content of the finished paper-a protection against costly feeding troubles.

And Hammermill Offset's special finishes provide a distinctive three-dimensional appearance. Because these finishes are alike on both sides they permit the economy of work-and-turn press runs.

SEE FOR YOURSELF the good job of reproduction that an be done on Hammermill Offset. Send coupon for a full size press sheet of the complete set of eight Treasure Island views. The supply is limited, so get your set now.

HAMMERMILL OFFSET

BY THE MAKERS OF HAMMERMILL BOND



Hammermill Paper Company

I'd like to have a press sheet of the eight pictures of the 1939 Golden Gate International Exposition. Please send one to me if the supply still holds out.

(Please attach to your business letterhead)

BUILD BUSINESS WITH BETTER LETTERS

JOHN WANAMAKER once said, "You have to know only a little more than your competitor to make a lot more money." It is the lithographer who knows a little more and does a little better than the other fellow who usually wins out. His buying is a little more economical, his knowledge of lithography and costs a bit more upto-date. His methods of retaining old and acquiring new customers are a bit more advanced. His employees are a bit more efficient, better trained, and pleasant. Last but not least, his letters are warmer and friendlier, more courteous and helpful.

Letters are not merely transmitters of thought, but stimulators of more friendly and more profitable business relations. The writing of letters is a vital part of every business, and the care and consideration with which they are handled determine in no small degree the success of the business. A business institution is judged by its letters as well as by its people. Whenever we meet someone face to face we have an opportunity to make a friend, and every letter written offers the same opportunity. When your letter enters a customer's office you enter it too.

While the message of a letter is its vital part, its appearance is also important. A letter neatly typed on a good quality paper, with an attractive letterhead, commands respect.

Good Will

With sharp competition making sales more difficult, good will is, more than ever, a major business asset. Every letter that produces a good impression creates good will. Helpful interest in the customer's problem, unexpected service, a cordial tone-all these make letters attractive and appealing, and generate good will. Conversely, to slight the feelings, desires or problems of a customer is to endanger or lose their patronage. In the photo-lithography field, where there is so much standardization of both quality and price, the type of service rendered often furnishes the only incentive for patronizing a particular establishment.

Every Letter a Sales Letter

Every incoming letter brings a business opportunity, and it is the correspondent's job to make the most of it. Regardless of its content, every outgoing letter should be a selling letter first and foremost, aimed at gaining or retaining good will. Most dictators of routine correspondence overlook the opportunity letters present for such purposes, and regard the dictation of letters as a minor task to be performed quickly rather than painstakingly. The quality and effectiveness of a letter depends upon the time and intelligence given to its preparation. If possible, replies to letters should be made on the day received, for promptness in handling correspondence is one of the surest means of developing buying preference.

Avoid Stereotypes

The avoidance of stereotyped phraseology is one of the primary requisites of good business letter writing. Stereotyped letters have no more personality than the typewriters on which they are written. Letters reflecting individuality react favorably on the recipient.

Be natural, write as you would talk, using a friendly conversational style. If two business men were in conversation, one would not say to the other, "I am in receipt of your esteemed favor of the fourteenth instant, and in reply beg to state..." Nor should such language be employed in a letter between them. Don't "beg to state" or beg anything else. It's just as easy to say "We have your letter" or something similar. Don't "advise" either—leave that to the lawyers. Also avoid such phrases as, "yours received," "contents noted," "the same," "herewith."

The beginning and ending of a letter should not consist of hackneved expressions. Close with "Yours truly" and not with "Trusting" or "Hoping" this and that. If a closing sentence is needed make it distinctive, with a definite thought in it. Prune the verbiage wherever possible. By leaving out rambling, meaningless phrases and sentences, the length of letters can be cut by as much as thirty per cent, with an equal saving in the time of the dictator and stenographer. It is estimated that each personally dictated letter represents an expenditure of at least forty cents. Many firms have effected large savings by studied elimination of the non-essential in their letters. In view of their cost, business letters must be efficient as well as concise to accomplish their objectives.

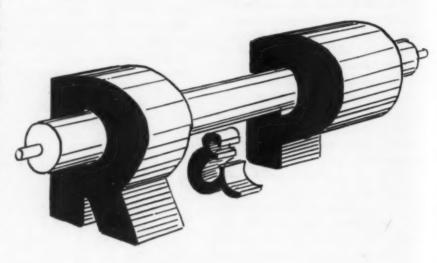


This beautiful cocktail lounge in the Wardman Park Hotel, Washington, suggests the handy facilities for mixing business with pleasure, when you attend the N.A.P.L. Convention, October 6, 7, 8.

When You Buy Molleton BE SURE IT'S THE BEST

The transfer of pure water from fountain to plate in just the right amount . . . evenly . . . free from lint . . . free from grease, oil, residue . . . is one of the most fundamental requirements in the lithographic process.

There can be no compromise with quality here. Your molleton must be of the best. Otherwise the finished job just cannot show the results you expect from good pressmen, inks, papers, plates and other supplies.



Other Robport Products to Help Guard Your Profits Against Excessive Production Costs

RUBBER BLANKETS
FLANNEL
SEWN MOLLETON &
FLANNEL COVERS
SEAMLESS MOLLETON
& FLANNEL COVERS
DAMPERS
LEATHER ROLLERS
HAND ROLLERS
SCRAPER LEATHER
SEAMLESS
FOUNTAIN ROLLER
COVERS

MOLLETON is our business. We have handled hundreds of rolls of it yearly for over forty years. The quality of our stock has never been better, and we have several hundred rolls to choose from. Let us send you samples.

ROBERTS & PORTER

INCORPORATED

ESTABLISHED IN THE LITHO SUPPLY BUSINESS OVER FORTY YEARS

New York: 100 Lafayette St., Phone: CAnal 6-1646

Chicago: 402 S. Market St., Phone: WABash 6935

Inquiries

An inquiry is the "livest" prospect a business deals with, and is often the first step toward a sale. Every letter answering an inquiry should be complete and accurate, giving all the information sought by the inquirer, and expressing a friendly interest in his problem. Lackadaisical, superficial handling of an inquiry may result in the loss of large sums in prospective business, hence all inquiries should be given prompt and careful attention.

Partial or indefinite information conveys a sense of uncertainty to the reader. Unfavorable reactions also result from unsatisfactory or vague explanations, and from the use of such terms as perhaps, sometime, somehow, might be, probably, possibly. Avoid boastful phrases, as they destroy confidence—such superlatives as "the finest," "lowest priced," and the like. Buyers want facts, not self-laudatory opinions. If superiority is claimed, give specific details.

Complaints and Adjustments

Things go wrong in the best regulated business, and there are always complaints and adjustments to be ironed out. Every just claim presents a valuable opportunity to rectify deficiencies in one's goods or services. Adjusting claims is a matter of prime importance, and demands the utmost tact and judgment. Complaint letters call for a prompt reply, as delay will aggravate the customer's dissatisfaction. Just complaints should always be settled to the entire satisfaction of the customer, or he is likely to take his business to a competitor.

Let the tone of an adjustment letter be explanatory and soothing, never argumentive, settling the difficulty in such a manner as to retain the customer's good will. Pacify him with statements of what will be done to rectify matters, and the steps that will be taken to guard against the recurrence of the complaint. Do not make impossible promises, such as "this will never happen again."

Consider the Final Result

In handling complaints and adjustments it is necessary to take a longrange view and consider the future

On Way to Centennial

THORMOD MONSEN, head of Thormod Monsen & Son, Inc., Chicago, nationally-known typographers and makers of negatives for lithographers, recently celebrated his ninetieth birthday.

The following outline of Mr. Monsen's career shows that he is one of the few men living today who was closely connected with the early developments of the lithographic industry in the United States.

Born in Stavanger, Norway, in 1848, Thormod Monsen helped his father, Mons Olson, in carpenter work and fishing in the fjords. It is an old Norwegian custom for a son to take his father's first name and add son to it and use this for his last name. This accounts for Thormod using Monsen while his father's name was Olson.

In 1863 he started as an apprentice in a Norwegian newspaper plant. Stories of the great opportunities to be found in America came to him and fired his ambition to start out for himself. The day finally arrived in 1869 when he started in an old sailing vessel to resolutely face the uncertainties of life in the New World. It took six weeks to cross the ocean in those days. He came straight to Chicago, then a crude bustling town. He was a clerk in a grocery store when the big Chicago fire broke out.

effect of the present action, foregoing an immediate advantage that may result in the loss of future business. Every day business is being lost as the result of unfair or ungracious adjustments. One curt, tactless, or sarcastic letter can destroy the good will that may have taken years of effort to build. Many a salesman has worked long and hard to get an account only to lose it through a tactless adjustment letter.

Every business letter affords an opportunity for the creation of good will, whether it sells, tells, adjusts, or collects. Letters get an attention that no other medium receives, and properly written they will definitely help to build and retain business.

He stood in front of the Sherman House at Randolph and Clark Streets when the bell on top of the City Hall across the street crashed through to the basement. He saw all of the buildings burn up to the Chicago Avenue pumping station, which still stands.

He spent several years at the University of Wisconsin in Madison and then took up printing in earnest. He worked for Victor F. Lawson, founder of the Daily News, and tells of the time when Mr. Lawson, himself, would catch the papers as they came off the press, count them and sell them to the newsboys.

In 1887 he started in business for himself, doing printing and typesetting for lithographers. Through a struggle of many years he built up a reputation of typesetting for lithographers and pulling type proofs best suited for their purposes. In 1903 fire destroyed his plant at the northeast corner of Clark Street and the river. Lack of insurance made it necessary to start all over again. In 1904 his son, Myron T. Monsen, started with him and together they built the business up to where today almost every printer and lithographer in the United States knows of the house of "Monsen-Chicago."

Thormod Monsen once composed a song named "Hilsen till Moder Norge." Captain Hjortdahl of the Norwegian American Steamer "Kristianiaford" liked it so much that in 1916 he took Mr. Monsen to Norway and back as his guest. Mr. Monsen retired from active part in the business upon his return from Norway.

In 1931 the third generation, Myron T., Jr. and Gordon L. came into the business, and recently Myron Jr.'s wife presented him with twins. Now Thormod Monsen has the satisfaction of knowing that the humble start he made may be carried on for a good many years more.

Nationally-known lithographic experts will be among those who are scheduled to make addresses at the N.A.P.L. Convention, October 6, 7, 8. Decide now to attend.

Users Write the Best Ads for CHAMPION ALBUMIN BRIGDENS LIMITED

Litho Chomical 4 Supply Co., for York, N.Y.

reputation for a business enjoying an international desired to street to those enpoys a contributing part to this reputation.

with satisfactory results Champion for about eight months our friendly competitors in color work.

Our Offset parties the supplies that will be supplied to supplied

LIMITED THE

lanager trinting Division.

Coation

Gentlemen,

".... must use supplies that will enable our men to make perfect plates"

> "....this method gives longer wearWe have been using Champion for about eight months with satisfactory results...."

We will add just two other facts:

- 1. Champion Albumin plates equal deep etch plates in durability and quality of work;
- They are year-'round plates unaffected by humidity.

Send NOW for more information regarding Champion Albumin. Not only will it save you a lot of headaches during the hot summer months, but you will find it a real quality-upper and money saver all year 'round.

April 19, 1938

Litho Chemical & Supply Company

63 PARK ROW, NEW YORK

In Chicago and vicinity, for a free demonstration of Champion Albumin plate making call on Nu-Way Litho Craftsman, Inc., 111 No. Wacker Drive — Phone Franklin 6991.

BUSINESS ANATOMY

By LATHAM B. MYERS

O NE day a man's leg said to his arm, "I am tired of hauling you around every day and all day. If it wasn't for me you wouldn't go places."

"Well," said the arm to the leg," I am just as tired, of reaching out every meal time to get food to feed you. You eat twice what I do. I've a notion to starve you for a while. It will hurt you twice as bad as it will me."

Can you imagine what would happen to our co-ordination if the parts of our bodies should start such argument? It is fortunate for us that the body is a perfect machine, and none of us has to settle disputes like this.

But business is also a complicated machine, requiring perfect co-ordination. In photo-offset, the arm of the sales department must co-ordinate with the leg of the order department, if the body of business is to be served. All offset houses try to encourage and increase this cooperation. This article contains a few ideas to show how the sales force can increase its part of this bargain. To give a basis for these ideas, let's see how jobs arrive in an offset house, and how they are put in production.

Jobs arrive at the order desk direct from the customer via messenger boy, or are brought in by the salesman. The order clerks inspect the copy, take out an order number, and put the job in work. If the copy needs preparation of any kind, such as type-setting or lettering, etc., it is sent to the proper department. If the copy is ready for the camera, it is marked, keved together, and scaled for the camera man. An order is then written out that will be a guide for every person working on the job. The price of the job is compared with the estimate, or quoted price, to be sure the work being ordered is included in the anticipated cost.

In some plants the order department's duties are extended, and they are made responsible for copy from the time received. In other words, they order type set or typewritten matter, giving instructions to the compositor, and to the persons doing

the various forms of copy preparation. They are then responsible for the follow-up and o.k. of proofs to and from the customer. Under this system the order department is a real production office, and the order writer an inside contact man with the customer. At any event, in most all photo-offset plants the order department is responsible for a careful inspection of copy, scaling and focusing it; for an accurate set of instructions to all persons handling the work, and checking prices against estimates.

With these duties to perform, it is easy to understand why they must have ample and accurate information when the copy comes in, or when the job starts. Where does this information come from? Generally these are the main sources:

1, The Salesman; 2, The estimate; 3, The customer; 4, The salesman's dummy order; 5, The customer's order.

Of the above, the salesman is by far the most important source. He, himself, brings many jobs in, which the customer has explained to him, and which he relays to the order department. Besides these jobs, he knows his customer's needs and requirements intimately, and can answer many questions that arise before copy is ready for the camera. The estimate is an important source, in that it supplies the layout of the job, details of materials figured, and price. The salesman's dummy order is really a supplement to the salesman's explanation, or serves if he cannot explain it to the order department himself. The customer's order is usually helpful, but many times supplies no more than the customer's order number, the amount of prints required, and the price quoted. Many times the order department calls the customer on the 'phone to get direct information, and he furnishes it gladly.

After this casual glance over the sources of specifications and information, one is struck by the fact that the

salesman himself controls four out of five of them. The estimate is the only one over which he has no direct control. The management controls the estimate. If we then would try to make information to the order department more full and complete the salesman is the man to whom we must turn.

A salesman's job is to sell his product, his house, himself, to his customers, and keep the orders rolling in. Any duties that do not directly do these things sometimes seem to be a waste of his time. If he has too much inside detail to attend to, he is prevented from spending the proper amount of time making and developing contacts, and looking for business. But one of the best ways he can be sure of holding the customers he has, and keeping them satisfied, is by being certain that the orders he has in the plant are clearly understood. Once he is sold on the importance TO HIM of having his jobs clear, with all specifications and details, he is sure to cooperate for in most any offset house in New York you will find the sales department to be the smartest, keenest, most alert group in the organization.

What are a salesman's responsibilities in an order, once he has brought it into the house? He can surely stick out his chest and say, "I have brought in the bacon." And he has really brought it in. Still, unfortunately, his responsibility does not end there. Photo-offset is a business in which no two orders are exactly alike. On a large percentage of jobs, no proof is submitted to the customer for ok, and the first glimpse of the job he has is the printed job. If there are any errors at that point it is too late, and just too bad. Our business calls for high efficiency, accuracy, and a low percentage of errors. This means complete understanding of what is required on a job. Misunderstandings mean errors, complaints, loss of customers, loss of profit and income. Realizing this, and that there is big room for improvement, here are 10 suggestions for the salesman on ways

Modernize

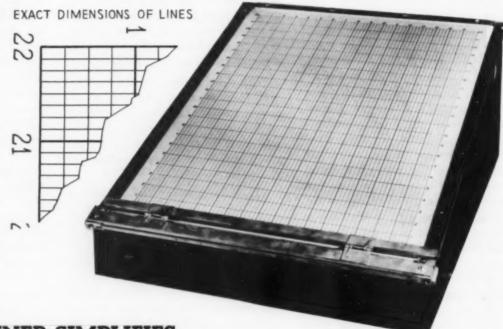
your layout work and pasteup for the camera by using a new instrument, especially designed for that purpose... the **new** HAMILTON

LIGHT-ALINER

A new system line-up and register table which eliminates squares and measuring instruments.

WHAT IT IS

The HAMILTON Light-Aliner is a compact, 201/2" x 231/4", green steel box with a translucent, specially "coated" glass working surface. There are accurate, permanent lines on the glass, spaced 1/4" apart vertically and 1/4" horizontally, with heavier indications at every inch. These guide lines are clearly visible through several thicknesses of paper . . . Eye strain is minimized by the use of outside frosted light bulbs and the translucent glass top... This combination breaks up the light rays and prevents glare. Only the patented No. 16490 HAMILTON Light-Aliner gives you these features



THE LIGHT-ALINER SIMPLIFIES ALL WORK PRELIMINARY TO PHOTOGRAPHING

● The layout man is guided by the accurate measures on the glass surface—made visible through several sheets of paper—which give a complete outline as to size, margins, etc. It enables him to trace type and illustrations to the original layout without the use of tissue paper. After using the light feature for such outline, his normal work is completed as on an old fashioned drawing board. ● The layout being preliminary to typesetting and art work, the next feature in the LIGHT-ALINER is to check the composition as to over-all size, straightness of each item and each line, and fitting the illustrations into predetermined spaces (several colors can be lined up and checked at the same time). ● When the paste-up artist is given a number of small items to consolidate and fit into a single page of a publication, a complete broadside or other printed material, he does not need a

T-square, ruler, or other measuring instruments. He will just switch on the light and find that the outside dimensions are clearly and accurately shown. Thereafter his work of pasting up is simplified to such a degree that it can proceed faster and more accurately than by the old fashioned hit-and-miss method of T-squares and triangles. He is enabled to paste up any item on top of the lines which penetrate his layout paper all over. These lines will also penetrate the paper on which his proofs are printed. Several colors can be pasted up for photography with hair-splitting accuracy.

While the size of the LIGHT-ALINER will not permit a single sheet to be prepared large enough for the standard size plate, it is obvious that two or more perfectly executed parts can easily be combined into one larger size for the camera.

The new Hamilton LIGHT-ALINER is only \$87.00 (without bulbs) f. o. b. your dealer's city (slightly higher in South and West). Optional equipment: special size T-square, \$3.00; combination paper guides and clamps, \$4.50.

Distributed by THE LIGHT-ALINER CO., Elmhurst, New York. HAvemeyer 9-3721.

Be Modern! Simplify your work with a LIGHT-ALINER

to make this part of his job easier, to save his time, and to make his customer better satisfied:

- I. If the customer explains a job to you, in addition to the actual printing requirements, try to find out HOW the work is to be used; try to find out how it is distributed, what is the main idea of appeal back of it.; what is his general idea in creating this work. This information will enable you to answer, and even anticipate many questions that may arise in making up the job. It gives personality to the job in your mind, and will enable you to serve your account better.
- 2. Encourage your customers to give you a written order with the copy, not later. Try to educate them to put useful details in their orders. Tell them the information you would like to have them put in. You will be surprised at the response your regular customers make when they find out why you ask this. They will appreciate the fact that small orders they send in without calling you in to pick them up, will go through the plant with a greater chance of accuracy. If the customer feels that he cannot give you an order with the copy, because the price details are not all fixed, try to get him to give you a requisition, with the main points of the transaction noted on it, and the formal order can follow later. The order department always checks these orders, if they come in with the copy. If they arrive much later, their chance of being any kind of a check-up on details is very small.
- 3. Turn in an estimate with the copy. If none was made out in advance, get the estimator to run through it, and send the estimate to the order department later. This helps you to be sure that all price details are set before any work is done on the copy.
- 4. If the nature of the work does not require an estimate, give the order clerk a dummy order, which has the most important details on it, and the price. Verbal instructions can be forgotten, but things in writing are rechecked, and are more certain to get attention.
 - 5. If you get the instructions from

the customer, watch for the details on margins, copy sizes, and placing of inserts. Look the copy over for quality. Questions on these points after the job has started will waste more of your time later than the time to get it at the start.

- 6. Try to have billing and shipping instructions in advance. It will save you time and 'phone calls later, and may save delays in the delivery of the job.
- 7. If you bring in instructions on typography, go over them with the proper party, taking time enough to be sure he has all the information he needs as to style of type, size, and face of type required, position of copy, spacing, indentation, leading out between lines, price of composition allowed, time needed, and when and how proofs will be ok'd by customer.
- 8. If there is creative work to be done, copy to be written, sketches to be made, photos to be posed, give plenty of time and thought to conveying the idea to the party who is to do the work. If retouching of photos is to be done, go over the work carefully making sure it is definitely understood how much work is to be done, and how much is to be spent on it.
- 9. Make specific arrangements about proofs of copy, VanDyke proofs, or color proofs. In other words, be sure the order department understands what proofs are required, and how they are to be submitted; also when they will be ready.
- 10. Give the finishing operations a final once over to see that they will bring the job to your customer so that he can use it in exactly the way he has in mind, so that it is ready to accomplish his purpose. Such small details as banding, or even packaging in correct quantities can please or displease him very much.

The real thought back of these suggestions is that if you will try to be fore-handed, and do a bit more planning at the start, it will repay in relief from questions and troubles later. Planning in advance will save a lot of fussing and frantic fixing later. Lessen trouble by doing a little more if possible at the start.

R. Hoe & Co. May Sell English Subsidiary

A special meeting of the stock-holders of R. Hoe & Co., Inc., has been called for August 17 to consider a proposal to sell the business of R. Hoe & Co., Ltd., the company's English subsidiary, to R. W. Crabtree & Sons, Ltd., of Leeds, England.

The plant of the Company's English subsidiary consists of scattered buildings not adapted to modern production methods and approval of the contract will eliminate the problems connected with the building of a new London plant.

The British purchaser obtains in addition to working assets the good will and the right to use the name "Hoe" in connection with printing machinery only and agrees not to use it in North and South America.

Copifyer Scores Again

"Shaker Heights-Then and Now" is the title of a most attractive book, describing a model community within the confines of the city of Cleveland, Ohio, which was printed by photo-offset by Copifyer Lithograph Corporation, Cleveland. Its 128 9 x 12 pages, enclosed in stiff covers, bulk to the impressive thickness of five-eighths of an inch, and almost three hundred photographsmost of them candid camera action pictures-supplement the text to make a community book that will be a treasured volume in most Shaker Heights homes for many years.

The book starts on front cover with a large bleed-off photograph, and ends on back cover with a photograph—both lively, human interest subjects. It is a striking illustration of the fact that photo-offset is the ideal process for printing such a book; no other process could, practically and within the limits of a modest budget, result in a volume so impressive and so full of faithful halftone reproductions.

Copifyer Lithograph Corporation has grown from one press and six employees in 1933 to eight presses and ninety-nine employees. Recently they established a Display Department for the production of all kinds of high quality display advertising.



Sometimes the Grass IS Greener

Why are so many companies so eminently successful in getting out catalogs that sell effectively, while equally fine organizations struggle for consumer attention?

Of course there are many reasons for "greener catalog pastures"—not the least important of which is the sometimes neglected item of DISPLAYMANSHIP: The ability of a display book to catch and hold a buyer's attention while directing him to the point of sale.

Then why is there such a great difference in the relative selling power of catalogs? They're certainly not all equally effective in paying their own way.

The really successful catalogs and display books are PLANNED—they've been BUILT TO SELL in a vital, interesting, and convincing manner. And Wire-O Binding is the

backbone of successful displaymanship. The Who's Who of American Business is re-ordering Wire-O. The grass really is greener for those creators of catalogs who have taken the trouble to prove that our claims for Wire-O are true.

Wire-O materially adds to the merchandising effectiveness of the contents which it serves—: Where Wire-O is, there you will find profitable Business. A catalog built around Wire-O outsells the field, and your nearest licensee is amply equipped to prove his points, and on your specifications. Wire-O Binding is so vastly superior that it is worthy of your thorough investigation and intelligent, original use.

Published in the interest of its licensees by TRUSSELL MANUFACTURING COMPANY POUGHKEEPSIE, NEW YORK

BE SURE TO LOOK CAREFULLY AT WIRE-O BINDING... WIRE-O SELLS... CALL IN YOUR WIRE-O SALESMAN

*Patents Pending

WIRE-O BINDING CO.
200 VARICK ST., NEW YORK
WIRE-O BINDING CO.
732 W VAN BUREN ST., CHICAGO
PLIMPTON MFG CO.
HARTFÖRD. CONN.
P. P. KELLOGG & CO.
SPRINGFIELD. MASS COAST ENVELOPE & LEATHER PRODUCTS CO DAVIS & HENDERSON HAMMOND, IND

SAMUEL DODSWORTH STATIONERY CO.

KANSAS CITY, MO
FOREST CITY BOOKBINDING CO.
CIEVELAND, OHIO

AMERICAN BEAUTY COVER CO.
DALLAS, TEXAS

BLACKWELL WIELANDY CO.

DOBSON-EVANS CO.
COLUMB NO.

COLUMB SO.

COLUMB SO.

COLUMB SO.

COLUMB SO.

COLUMB SO.

COLUMB SO.

COLUMB SO. KANSAS CITY, MO
FOREST CITY BOOKBINDING CO.
CLEVELAND OHIO
AMERICAN BEAUTY COVER CO.
DALLAS, TEXAS
BLACKWELL WIELANDY CO.
ST. LQUIS MO EASTERN TABLET CORP. OPTIC BINDERY BALTIMORE MD.
PHILADELPHIA BINDERY, INC.
PHILADELPHIA, PA:
WIRE-O BINDING DIV., PHILADELPHIA VILLEMAIRE BROS. HAWKEYE BINDERY CO. MONTREAL QUE.

BOORUM & PEASE CO.

BROOKLYN N. Y.

SCHWABACHER-FREY CO. DES MOINES, IOWA
GEORGE SEELMAN, AND SONS CO.
MILWAUKEE, WIS.
SAUGERTIES, MFG. CO.
SAUGERTIES, N. Y.
IRWIN HODSON CO.
PORTLAND, ORE.
ROCHESTER, WIRE-O BINDING CO.
ROCHESTER, N. Y.
ARKANSAS PRINTING & LITHOGRAPHING CO.
LITTLE ROCK, ARX. BINDERY, INC.
PITTSBURGH, PA.
J. GAGE & CO. CLIVV ABACHER-FREY CC SAN FRANCISCO, CALIF. CLARKE & COURTS HOUSTON, TEXAS. LEVEY PRINTING CO. INDIANAPOLIS IND. M. M. BORK AND SONS BUFFALO N. Y. GIBSON & PERIN CO. CINCINNATI, OHIO
MICHIGAN BOOK BINDING CO.

16 WAYS TO GET PROSPECTS

By GENE LAWRENCE

No business house can depend for its growth on its present accounts, but must rely upon the acquisition of new ones. Getting more business means getting more prospects, and getting more prospects is a job usually alloted to salesmen.

Few organizations can supply their salesmen with sufficient leads, hence salesmen must' depend upon their own efforts to locate them. Systematic methods should be used in seeking new prospects, for system produces far more consistent returns than haphazard effort. Plan the work and then work the plan.

For planning his calls, the salesman should keep an index file of all prospective customers, and an efficient follow-up system. Call planning depends upon knowing definitely where you are going to call, whom you are going to see, what products are being used, and what your sales arguments are going to be. Hit-ormiss methods will not do.

An investigation of the salesman's workday by a number of national organizations revealed the fact that salesmen spent only fifteen per cent of their time in actual contact with buyers. Forty per cent was used in traveling, twenty per cent in waiting for interviews, and twenty-five per cent in miscellaneous detail. Subsequently, by careful planning and routing, the time spent in actual selling was almost doubled, with a proportionate increase in sales.

In such a diversified field as photolithography it is impossible to lay down a prospect-seeking program that will fit every need. Salesmen must ascertain how and where names of new prospects can best be secured. Only a few suggestions can be offered here. The methods of seeking prospects group themselves broadly into the following classifications:

1. Active Customers. Do not neglect the possibilities of increasing your sales to present customers. They are the best prospects for selling repeat orders, complete lines, new products, and new ideas. 2. Inactive Accounts. These furnish the best opportunities for salesmen. Find out why you're not getting their business. Whatever the reason, there's your opportunity! The names of inactive accounts can be secured quite easily by consulting old ledger accounts.

3. Office Leads. The salesman should see that his office turns over to him all the leads arising from incoming inquiries. Company officials can often furnish valuable leads, also the office mailing lists.

4. Canvassing. The hardest way of adding prospects, but an essential one. A definite amount of time should be devoted to it.

5. Contacting Letters. Such letters aim to develop new prospective customers. They are written to firms who have never been contacted before, and pave the way for the salesman's call. Emphasize the special selling points of your product and service. The sending of samples is often an efficient method of securing prospects. Letters can also be used for working territory which cannot be covered by personal visits.

6. Social Contacts. If tactfully handled, an excellent source of prospects. Friends and acquaintances, clubs and fraternities, all furnish opportunities for acquiring leads.

7. News Items. Newspapers, trade journals, and other periodicals furnish many leads. Keep a clipping file, or have a press clipping bureau do it for you.

8. Customers' Leads. If asked, many customers will supply leads, as they are usually familiar with what is going on in their field. Some salesmen depend almost entirely on such information for acquiring new prospects.

9. New Outlets. If you have acquired a customer in a new line of business, he can be used as an opening wedge for canvassing that field, or allied fields. Discovering new uses for your product will automatically

increase the number of prospects in that field.

10. Directories. Telephone and trade directories can be used to good advantage for locating leads in particular fields. One of the best for use in photo-lithography promotion is the Standard Advertising Register, which lists thousands of advertisers in hundreds of different businesses.

11. New Incorporations. New business houses come into existence every day. Newspapers and trade publications should be checked for such information.

12. Creative Selling. Leads are developed through constructive suggestions to advertisers for the use of lithographed material in merchandising their products—broadsides, display, direct mail, or booklets. This requires study of the prospect's advertising needs by the "idea salesman."

13. Exchanging Data. It is sometimes possible to exchange information regarding prospects with salesmen or business men in a related but non-competing field. Such individuals can be contacted in a prospect's office, at conventions, and elsewhere.

14. Personal Observation. Keeping one's eyes and ears open, and asking questions, can result in the discovery of new prospects.

15. Former Prospects. Following up former prospects should not be overlooked. Because he did not buy yesterday does not imply that he will not buy today, or in the future.

16. Tradesmen. Try to sell to those who sell to you. Those who get your business may give you theirs.

Increasing the number of prospects does not necessarily mean increasing the sales. Sometimes their number may have to be cut down in order to adequately exploit the business possibilities of one's territory. In prospecting for prospects, footwork cannot take the place of headwork, but if intelligently combined, it will not fail in getting new business.



Something You Are Looking For!

THE only facts that are worth anything to every lithographer are real results obtained from actual work accomplished in your own plant.

We feel we have the reason for good honest results in production and quality in our Reliable Offset Black No. 15000. This ink has been tested and the results have been well received not only for clean clear prints but also for the deep rich black tone it carries.

We are certain that one trial by you will add you to our list of satisfied customers. This is just what you have been looking for.

Send for Safety Ink Specimen Book

A Sign of High Quality

Over Half Century of Service

Get Your Copy Now!

Our New Handy Price List is just off the press, and in this catalog you will be able to find everything that is used in the lithographic plant. Why not avail yourself of this opportunity and get your copy of this wonderful time and money saver now?

J. H. & G. B. SIEBOLD, INC.

New York WAlker 5-9474-5-6

Office Printing INKS Lithographing 99-105 SIXTH AVENUE Lithographic Supplies

New York WAlker 5-9474-5-6

LITHOGRAPHIC PLATE GRAINING CO.

One reason why we have grown to be the largest plate graining plant in the world is that every plate, no matter how small, must be

exactly right before it leaves our plant . . and it must leave on "time" or sooner than promised.

Zinc and Aluminum Plates

UNGRAINED

GRAINED

REGRAINED

We specialize in small plates; including plates for the Multilith.

Service plus Quality - You get this important combination when you send your plates to us.

LITHOGRAPHIC PLATE GRAINING

41-43 Box St., Brooklyn, N. Y. of America, Inc. EVergreen 9-4260-4261

Paper Company Explains American Business

S. D. WARREN COMPANY, Boston, Mass., paper manufacturers, have published a series of bulletins primarily for the benefit of their own 2000 employees, describing the American business system, how businesses are built, how they are operated, and defining the position that business occupies in American life.

Lithographers and other business organizations who may want to inform their employees along similar lines are given the privilege by the Warren Company of using any part of the text of the bulletins, without crediting the source.

Part of the reasons for this series of bulletins is contained in the introduction to it which says, in part:

"Circumstance and political propaganda have made it necessary for American business to explain itself to a public that has been taught to be suspicious of explanations that come from business. Thus the influences that have made it necessary to explain business have also made it difficult to do it.

"The job of preparing explanations of American business is no problem. The facts are available and merely require arrangement. When they are added together and weighed, they are favorable to business. The problem is to find a way to assure the public that the facts are credible. . . .

"S. D. Warren Company believes that the facts about business can be made credible to a large portion of the public, if the facts are presented to small groups by spokesmen who are known and trusted by those groups. S. D. Warren Company believes that employers who respect (and are respected by) their employees are the logical spokesmen to make the facts about business credible to those employees. Acting upon this belief, S. D. Warren Company has undertaken the task of presenting the story of American business to its own employees. . . . "

"Share Your Knowledge" Clinics will be held each day of the N.A.P.L. Convention, under the leadership of some of the most expert technicians in the lithographic industry.



New DeVilbiss Duster

A new air dusting gun, designed to meet the demand for a more compact, lower-priced duster, has been announced by The DeVilbiss Company, Toledo, Ohio. Known as Type DGA, this improved gun has an air capacity equal to that of a large standard model duster, yet is small enough to be held completely within the hand.

The gun is quickly and easily operated simply by closing the hand around the gun and squeezing the one-piece thumb button and valve stem located in middle of gun body. A removable brass nozzle is threaded into the gun body.

High pressures direct from the main air line or lower pressures may be used in operating this duster, which has an air consumption of 13 cubic feet at 80 pounds pressure. New straight line design puts the nozzle practically in line with the air hose, permitting use of the tool in close quarters without kinking or bending the hose.

Typographers to Meet in October

The Twelfth Annual Convention of the Advertising Typographers Assn. of America, Inc., will be held at The Cavalier, Virginia Beach, Va., on Monday, Tuesday and Wednesday, October 3, 4 and 5. The Cavalier is one of the famous resorts of the country with every facility for sports and enjoyment.

Many subjects of interest to the industry will be brought to the attention of the convention, various committees will report and there will be addresses on technical subjects and new developments in the business.

Litho Chemical & Supply Co. Establishes School

Faced with requests for demonstrations and instruction in plate making with Champion Albumin that has overtaxed the field personnel of their New York office, Litho Chemical & Supply Co. have made arrangements with a Chicago trade plate shop to take care of the Chicago area.

Effective at once all accredited, working, photo-offset plate makers are invited to visit the plant of Nu-Way Litho Craftsman Inc., 111 North Wacker Drive, Chicago. Here they will receive, free, a complete demonstration of and instruction in the processing of photo-offset plates with Champion Albumin and allied requisites.

In charge of this service is Curt Krause. Mr. Krause has been actively engaged in photo-offset for many years and is well-known in the Chicago area as a highly competent craftsman.

"This service bureau is in no way to be construed as a school for training men as plate makers," said Thos. R. Caton, President of Litho Chemical & Supply Co. "Its function is to inform the present, working plate makers as to the best methods to use to obtain the maximum results with our products. To prevent abuse of this new department we have mailed invitations to the established photooffset firms enclosing a certificate which must be signed by the employer to enable any of his shop personnel to obtain the free instruction we are offering, If the trade responds to this effort we will expand this service to other cities in the near future."

Philadelphia Bindery Moves after 25 Years

The Philadelphia Bindery, Inc., located for the past 25 years at 512 Race Street, Philadelphia, Pa., has moved its office and plant to the corner of Third and Vine Streets.

The entire 4th floor of 22,000 sq. feet has been scientifically laid out for maximum efficiency in both bindery and Wire-O Binding departments.



A "plastometer" used in the Vulcan Laboratory for measuring the firmness of Vulcan Blankets and Inking Rollers. The dial shows measurements in hundredths of millimeters.

Laboratory Controlled Manufacture Insures Long-Life Offset Blankets

Most lithographers and offset printers use Vulcan Offset Blankets; and one reason for this preference, which has been maintained for many years, is the fact that these blankets are manufactured under constant laboratory supervision. For uniformity of presswork, durability, and economy, Vulcan Blankets have long been considered pre-eminent by a majority of the trade.

New No. 43 Offset Blanket. Of all the popular types of Vulcan Offset Blankets, none has ever been received more enthusiastically than this new blanket. It is being used with equal success for multi-color work, commercial offset printing, photo-offset, and for various kinds of printing in which hairline register is required. It is good for screen work and for type; in fact, No. 43 is a truly all-purpose blanket, recommended for everything except metal decorating. No. 43 does not swell, stretch, or become tacky. It does not emboss or deboss. For all kinds of offset printing on paper stocks, its advantages from the standpoint of economy as well as quality, are almost revolutionary.

Other Popular Vulcan Blankets are the Vulcan Red Blanket, designed for metal decorating and widely used also as an all-purpose blanket; and the Vulcan Black Blanket, Style 808, which is a harder blanket preferred by many for color and other screen work. Vulcan Proofing Company, First Avenue and 58th Street, Brooklyn, New York.





Try This

if you want to get conclusive proof of the merits of

Eclipse

DEEP-SET

Black

Eclipse, made especially for use with deep-etch plates, is only one of the high quality offset and letterpress inks we make, both in black and colors. Run one-half of any job that calls for a real jet black with any other black ink. Then run the other half with Eclipse. Then . . . compare the results as shown by both the appearance of the job and the production records.

Gaetjens, Berger & Wirth, Inc.

Gair Building, 35 York Street, Brooklyn, N. Y. 538 South Clark Street, Chicago, Ill.

National
Puts
Glamour
in
Duotone



A LTHOUGH there is nothing new about duotones, which for years have meant reproductions in two impressions from duplicate half-tones of the same original, using two inks, it has remained for The National Process Company, New York, one of the pioneers in the development of duotone, to promote greater use of this attractive method of reproduction by fully exploiting its many possibilities in a beautiful book, "The Napco Duotone," published in July.

The book, published by National in collaboration with The Fuchs & Lang Manufacturing Company, Division of The General Printing Ink Corporation, New York, contains in its more than one hundred pages many beautiful examples of duotone, representing subjects of all sorts. Each example is followed by a page containing a color chart showing the wide range of effects obtainable with the two colors used, either as solids or tints, and either singly or in combination.

In addition to the variety in subjects and ink combinations used to reproduce them, a number of papers of different textures and types are used. All in all, this book is just about "tops" in the way of a promotional piece to represent a very worthy method of reproduction.

In the text National claims that Napco Duotones "make the commercial artistic and the artistic economical"; also that this method results in "three-color beauty at a two-color price—the biggest buy in the graphic arts processes."

A limited number of copies are available to readers of The Photo-Lithographer, from General Printing Ink Corporation, 100 Sixth Avenue, New York.

Less Privacy for Letterheads

International Paper Company, New York, are offering free of charge to lithographers and other letterhead manufacturers a Letterhead Analysis Chart, which delves very thoroughly into the purposes each letterhead is to accomplish, and then suggests how they can be realized. In addition to being a "yardstick" guide in letterhead construction, it advertises Adirondack Bond.

Webendorfer-Wills Starts Pension Fund

Webendorfer-Wills Co., Inc., the well-known manufacturers of presses and other printing machinery, Mount Vernon, N. Y., have announced the establishment of a Trust Agreement Pension Fund.

The Company started the Fund with a contribution of \$50,000, and it will be contributed to periodically both by the Company and by all employees who have been with the Company at least two years. It provides generous benefits in the event of the death, disability, or retirement of any employee.

Each employee will contribute two per cent of his salary, and the Company will contribute a sum at least equal to the employees' contributions.

Control, management, and distribution of the Fund will be subject to the approval of an Advisory Committee, made up of members appointed by the Company and others elected by the employees.

New Litho Press for Newspapers on Market

A roll-fed press for lithographing multiple-page newspapers, tabloid size, has been developed by Webendorfer-Wills Co., Inc., Mount Vernon, N. Y.

The press is designed to handle publications up to 10,000 circulation per edition, with both the press and the collator constructed to operate at a speed of 10,000 cylinder revolutions an hour.

Both sides of the sheet are printed in one operation through the press and rewound into rolls. The press will deliver a sheet 223/4 inches long, handling four pages at a time, thus making economical the lithographing of a weekly newspaper of four and multiples of four pages.

During the three days of the Sixth Annual Convention of the National Association of Photo-Lithographers, to be held at the Wardman Park Hotel, Washington, D. C., October 6, 7, 8, you are likely to learn more about the new developments in the industry—and there are tots of them—than in three months otherwise. Decide now to be there!

SAM'L BINGHAM'S SON MFG. CO.

MANUFACTURERS OF

LITHO-OFFSET ROLLERS

MADE AS ORDERED OF

VULCANIZED OIL or LITHO-PRINT

ORDER THROUGH THE FACTORIES BELOW:

ATLANTA CHICAGO CLEVELAND NASHVILLE DES MOINES DETROIT DALLAS

INDIANAPOLIS KALAMAZOO KANSAS CITY ST. LOUIS MINNEAPOLIS PITTSBURGH SPRINGFIELD, O. OKLAHOMA CITY

Pacific Coast Representatives:

CALIFORNIA INK COMPANY, INC.

SAN FRANCISCO, LOS ANGELES, PORTLAND, SEATTLE, SALT LAKE CITY

EQUAPO

"ANOTHER TRIANGLE TRIUMPH"

AN OFFSET BLACK THAT GIVES AMAZING RESULTS

This Offset Black Ink our chemists have perfected has a density that will surprise you. It works smoothly on the press; has all the coverage you expect; dries quickly, yet does not tone down; gives to solids that rich, velvety effect your customers like, yet

prints type and fine details of halftones as clean and sharp as could be desired. Test out EQUAPO on the next job for a fussy customer. You will then agree that it is the finest offset black that has ever been produced, with complete opacity, richness of tone, yet moderately priced.

AND

A REAL PEACOCK BLUE that is absolutely Permanent to the elements and will withstand heat, alkali, acid and alcohol.

TRIANGLE INK and COLOR CO. INC

Manufacturers of Fine Litho & Printing Inks for All Purposes

Service Offices
219 W. FRANKLIN ST. BALTIMORE, MD.
231 CONGRESS STREET, BOSTON, MASS.
1036 BEAUBIEN ST., DETROIT, MICH.
13 SOUTH 3RD STREET, ST. LOUIS, MO.



Main Office & Factory
26-30 FRONT STREET, BROOKLYN, N. Y.
Telephone Triangle 5-3770-71

LITHOGRAPHIC ABSTRACTS

Abstracts of important current articles, patents, and books, compiled by the Research Department of the Lithographic Technical Foundation, Inc. These abstracts represent statements made by the authors of articles abstracted, and do not express the opinions of the abstractors or of the Research Department. Mimeographed lists have been prepared of (1) Periodicals Abstracted by the Department of Lithographic Research, and (2) Books of Interest to Lithographers. Either list may be obtained for six cents, or both for ten cents (in stamps). Address the Department of Lithographic Research, University of Cincinnati, Cincinnati, Ohio.

Photography and Color Correction

A New Method of Film Montage without Glass Plates. Anonymous. Deutscher Drucker, 43, 163-65, August 1937. The most varied descriptions of film montage for offset and photogravure have been published but a satisfactory solution is lacking. Large glass plates must be of plate glass without defects, which means high cost and uncertainty in production because of breakage. Certain glass-montage methods are also subject to license fees. "Chromophan," a transparent, flexible support, sold in sheet thicknesses of 0.15, 0.20, and 0.30 mm., is said to hold the size indefinitely and can be immersed in water. Films are held in place on it with adhesive tape or glacial acetic acid. They are located over a diagram drawn on cardboard, or on a blue-dyed albumen key printed directly on the Chromophan. It is said that color work, mounted on Chromophan, may be stored and reprinted at any time in register, and that mounting on Chromophan and printing on press plates in a vacuum printing frame has all the conveniences of sticking-up transfers and certain advantages over photo-composing. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, pp. 172-3 (1938).)

Correction of Tone Values a Necessary Evil? J. Falch. Deutscher Drucker, 44: 9-11, No. 1, 1937. Retouching, which is usually done on the original, is distinguished from tone-value correction, which is necessary in order to obtain a set of printing plates that will give the best reproduction. Such corrections must be adapted to specific processes, e.g., photogravure, relief, or offset printing; and they may be considered as techniques to improve the suitability of originals for reproduction by these processes. Contemporary processes are the result of a systematic and logical growth, none of which permits absolutely mechanical operation. Quality production depends on careful organization in the plant, and high flexibility of the process, because the problem is not so much facsimile reproduction as the improvement of the original for merchandising power, illustrative clarity, etc. The method, which is now popular in the United States with color photography, of interpreting the original by a short-scale approximation, is a step forward. It is just as applicable to the reproduction of painted sketches. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, p. 169 (1938).)

The Black Printer Negative. F. J. Tritton. The Penrose Annual, 40, 1938, pp. 126-8. The usual methods

of preparing the black printer negative require extensive hand correction, but a method is being developed which will not require such correction. This method uses infrared plates and a special filter to cut out visible light. Blacks, which almost invariably include carbon black, are excellent absorbers of infra-red while most pigments, with the exception of those containing iron (e.g. Prussian blue, also known as bronze blue, Milori blue, Chinese blue, Antwerp blue, etc., and the siennas, and the yellows containing Prussian blue) are reflectors of infra-red. Hence if pigments containing iron are avoided, the black printer negative can be produced directly. One precaution must be taken in preparing the copy, namely, black must be used in all shadows. Reproductions of color charts demonstrate the effectiveness of the infra-red method.

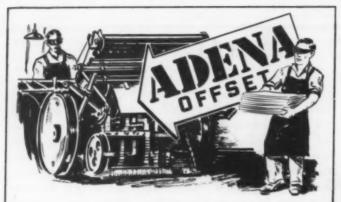
Color Harmony for the Photographer. H. Weller, Jr. Camera Craft, 45: 55-6, 58, 60-2, February 1938. The principles of color harmony are explained and a number of definitions are given. The author discusses briefly the difference between primary and complementary colors in light and pigments, between additive and subtractive color combinations, and between the three dimensions of color. Definitions are given for triads, warm and cool colors, keyed colors, neutralized colors, color contrasts, the psychology of color, and the various color harmonies, i.e., analogous, monochromatic, complementary, and triadic harmonies. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, p. 174 (1938).)

The Black Plate. A. Kuhn. Reproduktion, 9: 4-5, January 1938. Half-tones of a color scale show the types of black prints obtainable with several filters. It is suggested that the combination of filters be juggled to suit the original. Until better control can be exerted over commercial artists, infra-red black printers are not recommended by the author. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, pp. 170-1 (1938).)

Screen-Plate Reproduction. V. Schwarze. Share Your Knowledge Review, 19, No. 7, May 1938, pp. 22-4. A short history of screen-plate color photography is given, and the underlying principles are discussed briefly. The Dufaycolor and Kodachrome processes are explained, and their advantages and limitations in reproduction work are discussed.

Planographic Printing Surfaces and Plate Preparation

Printing Surfaces. H. Wolff. British Patent No. 481, 252 (July 20, 1936 and Sept. 7, 1936). A foil of aluminum or aluminum alloy for use as a printing-surface has both its surfaces treated to render them capable of retaining water. This treatment is effected by electrolytic means by suspending a large number of foils in a bath containing a weak electrolyte preferably comprising a



A SURE SUCCESS ON THE PRESS

Adena Offset possesses the happy faculty of giving satisfaction to all parties concerned: pressman, "big boss," customer, consumer.

Adena is a quality sheet made under careful supervision . . . with the added feature of Dual Control, which permits putting Adena on the press direct from the case or skid. It is READY TO RUN! SAVES TIME. WORRY, EXPENSE.

Note that Adena is tub-sized; lies flat;

will not wrinkle; has no fuzz or lint - no wonder it's a sure success on the press!



Priced for quantity runs.

Makers of Quality Offset, Lithograph ICOT PAPER COMPANY

Executive Offices and Mills: CHILLICOTHE, O.

Eastern Office: 41 Park Row New York, N. Y.

Pacific Coast Office: Sales Offices: 1003 N. Main Street Los Angeles, Calif.



HYDROQUINON

of "physical perfection". Smooth and silky to the eye and touch. Enlarged photographs shows the crystals exceptionally uniform. That's why it is free-flowing — easy to handle. It makes beautifully clear solutions. Order by name MALLINCKRODT -

PLUS

these

Acids Acetic Boric Chromic Citric

Gallic Lactic Nitric

Phosphoric

Albusol* (Albumen) Alum Potassium Photo Chrome Potassium Ammonium Bichromate Ammonium Nitrate **Ammonium Phosphate** Barium Chloride Calcium Chloride Collodion Photo Ether Glycerin

Hydroquinone Hyporice*

(Hypo in Rice-Like Grains) Iron Chloride Magnesium Nitrate Paraformaldehyde Pictol* (Photo Developer) Potassium Bichromate Potassium Bromide Potassium Carbonate Potassium Ferricyanide Potassium Ferrocyanide Potassium Hydroxide Potassium Meta-Bisulfite Silver Nitrate Sodium Bisulfite Sodium Carbonate Sodium Hydroxide Sodium Sulfite

* Trade Mark Reg. U. S. Pat. Off.

Have you a copy of the Mallinckrodt Catalog to be kept in easy reach? If not drop a card for one.

ALLINCKRODT

CHEMICALS FOR 7.1 YEARS"

Second and Mallinckrodt Sts., ST. LOUIS, MO. 70-74 GOLD ST., NEW YORK, N. Y

mixture of oxalic and lactic acids, and the maximum strength of the bath being not more than ½ per cent acid. The bath is provided with conductor bars supplied with alternating current, and conductor bars connected to the positive of the direct current supply. Lead electrodes are connected to the negative terminal of the direct current supply. A perforated plate is positioned below the foils, and compressed air is introduced into the space below the plate to remove gas bubbles formed in the bath during operation. If a cover is provided for the bath, a vent hole allows the compressed air to escape.

Offset Printing from Stainless Steel Sheets. Anonymous. Deutscher Drucker, 44, Dec. 1937, pp. 115-6. The copper, image-bearing, ink-carrying layer is extremely thin and can be readily stripped from the steel when a run is finished. The steel only needs replating with copper to be used again, and may be used indefinitely. Advantages of the process are as follows: the long life of the plate, the improvement in printing quality because of the absence of grain and the small amount of water required, and the lightening of the pressman's work. The plate need never be gummed. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, p. 173 (1938).)

Scumming and Other Plate Troubles. I. H. Sayre. Midwestern Lithographer, 2, No. 12, April 1938, pp. 5-6, 9; 3, No. 1, May 1938, pp. 5-6. A detailed list of the causes of scumming, filling, and other plate troubles is presented, and corrective measures given. Methods of hardening the image after development, such as exposure to light, baking, allowing to season, and tanning with chrome alum and other agents, are discussed.

The Efha Positive Rapid Print. Anonymous. Deutscher Drucker, 44: 72, November 1937. A synthetic resist, known as the "D-Coat," made from raw materials produced in Germany, sensitized with chromate, and developed with ammoniacal water, is said to require roughly one-eighth the exposure of the usual sensitizers. It is suggested for lithographic plates made from positives. (Monthly Abstract Bulletin of Eastman Kodak Company, 24, p. 172 (1938).)

Equipment and Materials

The Kodak Transmission and Reflection Densitometer. R. F. W. Selman. The Penrose Annual, 40 (1938), pp. 160-2. The preparation of a suitable negative or positive from an original is made easier if a means of measuring the densities of the negatives is available. The Kodak Transmission and Reflection Densitometer makes possible the density measurement of films, plates, paper, and metal printing plates. The instrument and its use are described, and the applications of density control are discussed.

Paper and Ink

The Approach to the Problem of the Printing Quality of Paper. P. H. Prior. Paper Maker and British Paper Trade Journal, 95, Midsummer 1938, pp. 4, 6, 8. The scientific approach to the problem of research on paper is discussed. Three lines of approach to the problem of evaluation of printing quality of paper are suggested.

What Moisture Does to Paper. W. B. Wheelwright. Paper & Printing Digest, 4, No. 5, May 1938, pp. 3-6. The dimensions of paper vary directly with the moisture content, which is influenced by relative humidity, temperature, and history of conditioning. Rigid precautions must be taken to keep temperature and humidity constant where exact registration is essential. Moisture also affects the strength and folding endurance of paper. The above facts make the control of heating and humidity in printing plants advisable.

The Problem of "Set-Off." Anonymous. British and Colonial Printer and Stationer, 122, No. 500, May 19, 1938, p. 504. To eliminate "set-off" in the highest class of work the procedure of interleaving should be used. For other purposes, the use of the anti-set-off sprayer has its advantages. Much may yet be done to solve the problem from the standpoint of the perfection of inks.

Dopes. J. Beierwaltes. Graphic Arts Monthly, 10, No. 3, March 1938, pp. 12, 14, 16. The metals cobalt, manganese, and lead are used as driers in the form of metallic soaps ground or dissolved in oils. The properties of these and other driers are discussed. Printing ink compounds, designed to give an ink certain properties such as improved laying qualities and reduction of tackiness, are mentioned. The use of modern driers to prevent offset or to help ink "set" is a fallacy, but waxes ground or dissolved in oils will help to do so. If the ink manufacturer is given the printing conditions, the ink will usually be satisfactory without doping. If it is not, however, there should be no hesitation in adding small quantities of a drier or compound.

Inks for Food Wrappers and Containers. R. Roley. American Ink Maker, 16, No. 6, June 1938, pp. 18-20, 39. Forty per cent of all inks consumed today are used in printing containers for foodstuffs and soaps. These inks must be inexpensive, must possess good color, must be odorless and free from poisonous materials. The toxicity or lack of toxicity of various types of pigments, oils, and driers is discussed. The hot-wax process of printing and coating paraffin wrappers is described.

General

Ink Distribution. C. W. Latham. Photo-Lithographer, 6, No. 6, June 1938, pp. 34, 36. Two theoretical methods of preventing the overcharging of form rollers while passing over the cylinder gap, and the subsequent over-deposit of ink on the first portion of the plate, are outlined. One method uses extra storage rollers outside of the ink feed stream to pick up excess ink from the form rollers, and the other provides for auxiliary storage rollers which pick up and redistribute excess ink after it has been deposited on the plate.

Proofs for Offset Work. W. H. Wood. Printing, 62, No. 3, March 1938, p. 31. Paper, ink, and choice of type face are the important essentials for satisfactory typographic copy to be photographed and printed by the litho offset process. The paper should be quite white, with a semi-glossy or glossy surface and heavy enough in weight to prevent plate sinking of the letters. Ink should

SINCLAIR & CARROLL INKS WIN YOUR CONFIDENCE

Responsible leadership and management have gained for Sinclair & Carroll inks a high place in the esteem of printers and lithographers. These inks prove their practical worth at press time and aid you in maintaining uniform production in the pressroom. The Sinclair & Carroll label on your ink container is an added guarantee of good printed and lithographed results. We will welcome the opportunities you afford us to supply your standard ink requirements and to serve you on special ink problems.

SINCLAIR & CARROLL CO., Inc.

PRINTING

INKS

LITHO

591-3-5 ELEVENTH AVENUE-Tel. BRyant 9-3566

NEW YORK CITY

CHICAGO: 440 W. Superior Street. NEW ORLEANS: 518 Natchez Street, Superior 3481

LOS ANGELES: 417 E. Pico Street,

Prospect 7296

Main 4421 SAN FRANCISCO: 345 Battery Street, Garfield 5834

RELIABLE LITHOGRAPHIC PLATE CO., Inc.

The Pioneer Plate Grainers of America

INCORPORATED 1916

Reliability Plus Service! "DELIABLE" is far more than just part of our name. It means to our customers that our plates can be depended on to give first-class results because from start to finish the graining is handled by experts of long experience. Our plates are made right to work right-they are reliable!

ALL PLATES, INCLUDING THOSE REGRAINED FOR MULTILITH, ARE MARBLE GRAINED

We carry a full supply of Zinc and Aluminum Sheets for Offset, Rotaprint and Rotary Presses, in fact for all the lithograph trade.

A trial order should "sell" you our services and products.

RELIABLE LITHOGRAPHIC PLATE CO., INC.

17-27 Vandewater St. and 45 Rose St., New York, N. Y. . Phone: BEekman 3-4531

be heavy-bodied, dull-drying and deep black; and eight point or larger type in bold or semi-bold face result in satisfactory proof and negatives. Some techniques for the preparation of photographic negatives are mentioned.

The Planographer. Anonymous. National Lithographer, 45, No. 6, June 1938, pp. 52, 55-6: Letterpress and planographic jobs are compared. Anomalies in costs exist in the planographic field because, in many instances, planography has been grafted onto businesses already in existence. Objections to planographic half-tones are discussed, and possibilities for correcting the faults are suggested. Charts comparing costs on letterpress and planographic jobs are included.

Miscellaneous

Printing Research. J. A. V. Fairbrother. The Penrose Annual, 40 (1938), pp. 144-7. The Printing and Allied Trades Research Association is investigating the variables which affect the transference of ink to paper. Such variables are climatic conditions including temperature and humidity changes; optical and mechanical variables connected with paper and ink; and variables connected with the printing process, such as printing speed and pressure. New apparatus used to measure the above factors are described.

Better Light—Better Work. E. J. Stankey. *Inland Printer*, 101, No. 3, June 1938, pp. 32–36. Increased efficiency in a plant is obtained by proper lighting fixtures. The most advisable type, quantity and direction of light for each part of the printing plant are discussed, and the

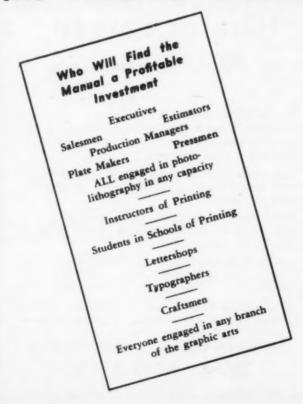
economic advantages of proper illumination are given.

Economic Approach to Air Conditioning. R. T. Williams. Inland Printer, 101, No. 2, May 1938, pp. 29-32. The economic advantages of air-conditioning a printing plant, chief among them being increased efficiency and productive capacity, are set forth. Fluctuations in production time are evened out, enabling accurate forecasting of running time, closer scheduling, and more accurate pricing.

Meinograph-Meinotone and Cellograph-Ebolite. J. E. Cobb. Share Your Knowledge Review, 19, No. 8, June 1938, p. 16. Meinograph is a method of preparing four-color separation negatives from black-and-white copy in photo-engraving. Colors are added on a celluloid flap superimposed on the copy and the colors and black are photographed separately. The Cellograph and Ebolite processes produce gelatin relief plates on celluloid which are mounted on blocks for letterpress printing.

The Electrical Transmission of Colour Photographs for Newspaper Printing. F. W. Plews. The Penrose Annual, 40 (1938), pp. 166-7. In the transmission of pictures in color, there must be a separate transmission for each plate. The grain of the paper should always run the same way, and before blocks are made the prints must be carefully checked for size. Exact synchronization of the dispatching and receiving machines is necessary. Formation of pattern between the screen pattern of the film and the scanning lines of the machine must be avoided. Prints transmitted electrically are simply records of color values in black and white.

The PHOTO-LITHOGRAPHERS MANUAL



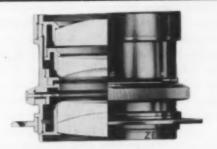
The Manual, lithographed throughout, includes information on every step in the production of a photo-lithographic job, from the time the piece is planned and sold through to mechanical completion.

Its 306 8½ x 11 inch pages are generously illustrated and contain a wealth of authoritative data that will clearly answer the hows, whys. and wherefores of planning, selling, and producing photo-lithography.

ALL FOR \$4.00 DON'T DELAY ORDER NOW . . . TODAY!

WALTWIN PUBLISHING COMPANY

1776 Broadway, New York, N. Y.



Supremely Fine Correction

The Zeiss Apo-Tessar lenses are famous for their uniformly high quality. They have the advantages of simplicity and compactness of design, and are the product of un-equalled manufacturing facilities, and a 91year tradition in the making of finest optical equipment. For chromatic correction, sharpness of definition and flatness of field. they are unsurpassed. Catalog upon request.

CARL ZEISS, INC. . 485 FIFTH AVE., NEW YORK 728 So. Hill Street . Los Angeles



reminder

like this may save you time and money, and

give you a better

job, when next you need

GRAINED ZINC

GLASS, ALUMINUM

AND MULTILITH PLATES

APO-TESSAR

The Mezzograph (Grain) Screen

Fine Quality - Prompt Service - Reasonable Prices

Illinois Plate Graining Co., Inc.

913-921 WEST VAN BUREN ST. • CHICAGO, ILL.

Get the brain plate Co. 1

Order brain plate

Chicago!

in Photo - Lithography

 $\mathbf{T}_{ ext{he}}$ Mezzograph Screen was originally made only in Europe, and in recent years has been excluded from this country by a prohibitive tariff. It is now manufactured in this country and has many uses.

It is invaluable in the reproduction of Copy which was printed from Half-tone plates, as "moire" or geometric pattern is avoided.

Perfect Highlight negatives may be made with it. In fact it affords the only simple and successful method of making perfect highlight negatives.

In Color Work, there is no danger of pattern at any angle. A slight shifting of the screen between colors is all that is required.

A Mezzograph Screen is used in the making of Litho-Collotype Plates: the most beautiful of all printing processes.

Manufactured Exclusively in the United States by

W. L. MOORE

10 W. Warren Ave.

Detroit, Mich.

MAY WE HELP YOU

to speed up make readys

By reducing your paper troubles such as distortion, wrinkling, static, picking, misregister and obtaining the correct moisture content. Or if you are troubled with any of the other mechanical ills of lithography as listed below, our experience in solving these problems may help you to make substantial savings.

> Maisture control and paper conditioning

Lack of depth and sharpness of grain

Press streaks and distorted halftone dots

Illuminating and arc lamp problems

Excessive plate spoilage

A. C. brakes and change over from D. C. advice.

If your technical man cannot give his undivided time to the solution of your problem

Consider Our Consulting Service C. W. LATHAM ASSOCIATES

6 LAFAYETTE AVE.

BROOKLYN, N. Y.

lhe zerring byyyde

THE first thing any salesman sells is himself. Next he sells his idea. After that he sells his merchandise or the service he represents. But he seldom gets to the final point unless he sells himself before he does

anything else.

Many salesmen believe that the best way to sell themselves is to deliver an oration about how good they are, about how smart they are, about how lucky the prospect is that they called. With the majority of prospects, they do themselves more harm than good, because no one likes a braggart.

John Mulholland, the magician, according to Fred C. Kelly, was a great salesman. He had a wonderful hold on his audiences. From the moment he stepped on the stage they liked him. Mr. Mulholland had found that the best way to do his "selling job"—sell himself and his act—was first to make his customers, the audience, that is, like him.

How did he accomplish it? He began the process by the manner in which he walked on the stage. He never slouched on, never sauntered on. He stepped briskly to a certain point. Then he stopped. This gave the audience the idea that here was a man who knew what he was about. Naturally they respected him for that.

Then he started his first trick. Holding a bird cage with a bird in it for the audience to see, he announced:

"When I throw this in the air, it will completely vanish." Then after a slight pause he added: "I nope."

That one word hope did the job. It showed humility. It showed modesty. The audience to a man couldn't help liking him from that moment on.

That old-fashioned virtue, known as humility or modesty, still does duty. Why can't a salesman use it to develop the same faultless technique of getting on the good side of his prospects with his very first words?

BY CHARLES B. ROTH

A GENIAL friend of mine, who is vice-president in charge of sales for a large concern, says that he started without the slightest equipment for success in selling.

"I stumbled into it," he explained.

Just through college, married, prepared for the ministry, he decided to take anything until the right church offer came along. An advertisement for a salesman appeared. He answered it and got the job. But no one ever took the trouble to tell him about his line, let alone to coach him in salesmanship.

"What did you do?" I asked.

"Struggled through my first interview, trying to tell the prospect something about a subject on which he was a good deal better informed than I. It didn't work. I saw that all right. So I changed my tack."

"And did what?"

"Asked my prospects about my line!"

"You mean had them tell you about the things you were selling?"

"That's right—and vou should have seen the way it worked! I was tops in the organization within six months. I never did go after my church.

"To my second prospect I said: 'I'm green in this game. I wish you'd tell me about some of these things. What do you think of this?' He'd tell me. He was glad to. Now and then, as he talked, I found some objection to the item. That made him defend it, pick out its good points and explain them to me. He tried to sell me on the item—and ended by selling it to himself.

"Of course I don't have to use that kind of salesmanship now, but I still ask my customers' advice upon many things. It flatters them. They like me for doing it and buy from me as a result. As a means of getting rid of chance acquaintances or friends there is one way which is better than asking to borrow money. Many a salesman has lost an order, many a man has lost an influential friend because he unwittingly followed it.

He has merely forgotten the man's name.

That common tag of mankind, the name, is one of the most important things in our lives. If you want to please people, the easiest way is to remember their names. This is a form of flattery which few of us can resist.

"But suppose I can't remember names. What then?" a salesman asked me just last week.

"Learn how to remember 'em," was my advice.

"How?"

Now that really is easy. All memory rests upon what is known as the law of association. You recollect by means of related or associated circumstances or objects. You pass through a town named Barton just as the sun is setting. To recall the name of the town you bring to mind the sunset. The name follows. That is what I mean by association.

Do this to remember names: Whenever you are introduced to a person, repeat his name. That helps embed it in your memory. Note the circumstances surrounding the introduction—the scent of roses in the room, the color of the wallpaper, an unusual picture or a statue. Then when you come to recall the name, these outside circumstances will rush to your aid. And you won't call him McGillicuddy when his name is McIntosh.

Imitation is probably as powerful a single factor in increasing sales as there is. If you can tell your prospect what a satisfied customer says there is no stronger argument you can use. And now — Here is an Odorless ONE-COAT WET-PLATE STRIPPING SOLUTION!

STRIPALAK

(Not a Lacquer

Here is a white, water-clear solution which will definitely increase wet-plate production. It has none of the objectionable qualities usually associated with one-coat stripping solutions. Stripalak is not a lacquer, contains no benzol, has no bad effects on workers, has no offensive odors. Hundreds of plants have already made exhaustive tests, pronounced it perfect.

MASKOLAK A ruby-red, non-actinic one-coat masking solution, ready for instant use. Ideal for masking layouts on glass or celluloid. Extremely easy to apply.

- Generous Sample Free on Request

STRIPALAK	MASKOLAK
1 QUART	1 QUART
NORMAN -	

NORMAN — WILLETS CO.
318 W. Washington St. Chicago, Ill.



COLOR SEPARATIONS •
BLACK AND WHITE •
• COLOR CORRECTED
NEGATIVES READY FOR
THE PHOTO-COMPOSING
MACHINE • POSITIVES •
PROVING • • PRESS
PLATES: ALBUMEN DEEP
ETCH • • •

TO E GUARANTEE the same confidence and integrity that would be found in your own plant.

WE OPERATE NO PRESSES NOR ARE WE AFFILIATED WITH ANY LITHOGRAPHIC HOUSE

SWART-REICHEL, INC.

Producers of Photo-Lith Work to the Trade
461 EIGHTH AVENUE • NEW YORK

Telephone BRyant 9-1906-7

OFFSET INKS

TIN PRINTING INKS
DEVELOPING INK
LITHO OPAQUE

Superior products designed for the finest work and developed in conjunction with leaders in the lithographic field.

THE CRESCENT INK & COLOR CO.

OF PENNSYLVANIA

464 N. FIFTH ST.

PHILADELPHIA, PA

DRISCOLL'S Offset Inks

- Assure Foremost Pressroom
 Economy
- Highest Possible Color Values
- Unfailing and Dependable Working Qualities

They also give you the satisfaction of knowing that when you buy them you are dealing with a house deeply interested in working out your every GRAPHIC INK PROBLEM.

USE DRISCOLL'S OFFSET BLACK (0237)

Write for Free Samples and Prices

MARTIN DRISCOLL & CO.

610 FEDERAL STREET CHICAGO

H PLANT IN MILWAUKEE, WISC.

"Where-to-Buy-It"

This Handy Reference Department is a regular monthly feature of THE PHOTO-LITHOGRAPHER. It is an accurate guide to reliable firms.

Listings are carried at the rate of One Dollar Per Line per Month or Ten Dollars a Year Payable in Advance.

ACCOUNTANTS

KROMBERG, J., & ASSOCIATES, C. P. A.'s, 461 Eighth Ave., New York, N. Y. Levess, Herbert H., C. P. A., 360 W. 23rd St., New York, N. Y.

REINISH, SAMUEL S., C. P. A., 2 Lafayette St., New York, N. Y.

IĖ

t.

e

CALIFORNIA INK Co., INC., 545 Sansome St., San Francisco, Calif.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y. PITMAN, HAROLD M., Co., 150 Bay St.,

Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

ADDRESSING AND MAILING SERVICES

ARDLEE SERVICE, INC., 28 W. 23rd St., New York, N. Y.

GRAY LETTER SHOP, JAMES, 216 E. 45th St., New York, N. Y.

AIR CONDITIONING EQUIPMENT

CARRIER CORPORATION, Syracuse, N.Y. Offen, B., & Co., 608 S. Dearborn St., Chicago, Ill.

ALUMINUM PLATES (See Plates-Aluminum-Zinc)

ALBUMEN

CALIFORNIA INK Co., INC., 545 Sansome St., San Francisco, Calif.

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.-111 Binney St., Cambridge, Mass.
MALLINKROCKDT CHEMICAL WORKS,

3600 N. Second St., St. Louis, Mo. and 72-74 Gold St., New York, N. Y. NORMAN-WILLETS Co., 318 W. Wash-

ington St., Chicago, Ill.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SENEFELDER COMPANY, Inc., THE, 32-34 Greene St., New York, N. Y.

AMMONIUM DICHROMATE

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

ARC LAMPS (See Lamps-Arc)

ARTISTS' SQUARES

ZOLTAN, JOHN M., 833 Lyman Ave., Oak Park, Ill.

ARTISTS' SUPPLIES

PEERLESS BLUE PRINT Co., THE, 347 Fifth Ave., New York, N. Y.

ASPHALTUM

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y. PITMAN, HAROLD M., Co., 150 Bay St.,

Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

BELLOWS

United Camera Co., Inc., 1515 Belmont Ave., Chicago, Ill.

PLASTIC - BREWER - CANTELMO Co., Inc., 118 E. 27th St., New York, N. Y. WIRE-O-TRUSSEL MFG. Co., Poughkeepsie, N. Y. (See list of licensees in display advertisement)

BLANKETS

BAINBRIDGE, PHILIP M. (Goodrich Rubber Blankets), 95 Madison Ave., New York, N. Y.

CALIFORNIA INK Co., INC., 545 Sansome St., San Francisco, Calif.

IDEAL ROLLER & MFG. Co., 2512 W. 24th St., Chicago, Ill., and 21-24 39th Ave., Long Island City, N. Y.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N.Y. RAPID ROLLER Co., Federal at 26th,

Chicago, Ill.

ROBERTS & PORTER, INC., 100 Lafa-yette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

Sinclair & Carroll Co., Inc., 591 11th Ave., New York, N. Y. Sinclair & Valentine Co., 11 St. Clair

Pl., New York, N. Y.

Vulcan Proofing Co., 58th St. and First Ave., Brooklyn, N. Y.

BRONZERS

CHRISTENSEN MACHINE Co., Racine, Wis.

HENSCHEL MFG. Co., Milwaukee, Wis.

CAMERA CONTROLS

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

CAMERAS

AGFA-ANSCO CORP., Binghamton, N.Y. CALIFORNIA INK Co., INC., THE, 545 Sansome St., San Francisco, Calif.

EASTMAN KODAK Co., Rochester, N. Y. LANSTON MONOTYPE MACHINE Co., 24th at Locust, Philadelphia, Pa.

LEVY, MAX, & Co., Wayne & Berkley Sts., Philadelphia, Pa.

LITHO EQUIPMENT & SUPPLY Co., 215 W. Ohio St., Chicago, Ill.

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

OSTRANDER-SEYMOUR Co., THE, 1870 S. 54th Ave., Cicero Sta., Chicago, Ill.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

REPRO-ART MACHINERY Co., Wayne Ave. & Berkley St., Phila., Pa.

ROBERTSON, R. R., 400 W. Madison St., Chicago, Ill.

RUTHERFORD MCHY. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

SULLEBARGER, E. T., Co., 116 John St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

WESEL MFG. Co., Scranton, Pa. ZEISS, CARL, INC., 485 Fifth Ave., New York, N.Y.

CARDBOARDS AND BRISTOLS

MEAD SALES Co., THE, 230 Park Ave., New York, N. Y. WHEELWRIGHT PAPERS, INC., 230 Park Ave., New York, N. Y.

CARBON (ARC LAMP)

PEASE Co., C. F., THE, 2601 W. Irving Park Road, Chicago, Ill.

CARBON PAPER RIBBONS

REMINGTON RAND, Buffalo, N. Y.

CARBONS

NATIONAL CARBON Co., Cleveland, O.

CARBONS—Photographic

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

NORMAN-WILLETS Co., 318 W. Wash-

ington St., Chicago, Ill.
SULLEBARGER, E. T., Co., 116 John St.,
New York, N. Y., and 538 S. Clark St., Chicago, Ill.

AGFA-ANSCO CORP., Binghamton, N. Y. CALIFORNIA INK Co., INC., THE, 545 Sansome St., San Francisco, Calif.

DEFENDER PHOTO SUPPLY Co., Rochester, N. Y.

Dom, G. C., Supply Co., Cincinnati, O. Eastman Kodak Co., Rochester, N. Y. Hunt, Philip, A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

LA MOTTE CHEMICALS PRODUCTS Co., 438 Light St., Baltimore, Md.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

MERCK & Co., Inc., Rahway, N. J. NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

PHILLIPS & JACOBS, 622 Race St., Phila., Pa.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.
SIEBOLD, J. H. & G. B., INC., 47 Watts
St., New York, N. Y.

COLOR CONTROL AND MEASURING EQUIPMENT

HUEBNER LABORATORIES, 202 E. 44th St., New York, N. Y.

COMPOSITION

LITHART TYPOGRAPHIC SERVICE, 228 E. 45th St., New York, N. Y. Monsen, Thormod, and Son, Inc., 740 N. Franklin St., Chicago, Ill.

COMPOSING MACHINES

COXHEAD, RALPH C., CORP., 17 Park Place, New York, N. Y.

CRAYONS-Litho

Korn, Wm., Inc., 260 West St., New York, N. Y.

ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

DAMPENING DEVICES

GOODRICH, B. F., CO., THE, AKTON, O. INTERNATIONAL PRESS CLEANER & MFG. CO., THE, 112 E. Hamilton Ave., Cleveland, O. WAGNER, CHARLES, LITHO MCHY. CO., 51 Park Ave., Hoboken, N. J.

DAMPENING ROLLER COVERS

GODFREY ROLLER COMPANY, 211 N. Camac St., Phila., Pa.
ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402

S. Market St., Chicago, Ill.

DEEP ETCH SUPPLIES

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill. Schultz, H. J., 2230 N. Racine Ave., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

DICHROMATE—Ammonium Photo Granular

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

DRYERS

CARTER, C. W. H., 100 Varick St., New York, N. Y.

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

SINCLAIR & VALENTINE Co., 11 St. Clair Pl., New York, N. Y.

DRYERS-Photo Print and Stripping Film

Simplex Specialty Co., Inc., 206 E., 33rd St., New York, N. Y.

DRYING OVENS

ZARKIN MACHINE Co., INC., 335 E. 27th St., New York, N. Y.

DYNAMOS—MOTORS—PRESS DRIVES AND ELECTRICAL CONTROL EQUIPMENT

AMERICAN TYPE FOUNDERS SALES CORP., 200 Elmora Ave., Elizabeth, N. J.

CLINE-WESTINGHOUSE, Chicago, Ill. CUTLER-HAMMER MFG. Co., 315 N. 12th Ave., Milwaukee, Wis.

GENERAL ELECTRIC Co., Schenectady, N. Y.

KIMBLE ELECTRIC Co., W. 14th St. & S. Damen Ave., Chicago, Ill.

NORTHWESTERN ELECTRIC Co., 408 S. Hoyne St., Chicago, Ill.

ROBBINS & MEYERS, INC., Springfield, Mo.

Westinghouse Electrical & Mfg. Co., E. Pittsburgh, Pa.

ENVELOPES

DAYTON ENVELOPE Co., Dayton, O. STERLING TAG Co., 1600 E. 30th St., Cleveland, O.

ETCHES

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

FADE-O-METER

ATLAS ELECTRIC DEVICES Co., 361 W. Superior St., Chicago, Ill.

FILMS

AGFA ANSCO CORP., Binghamton, N. Y. CALIFORNIA INK CO., INC., THE, 545 Sansome St., San Francisco, Calif. EASTMAN KODAK CO., Rochester, N. Y. GEVAERT CO. OF AMERICA, INC., THE, 423 W. 55th St., New York, N. Y. HALOID CO., THE, 6 Haloid St., Rochester, N. Y.

HAMMER DRY PLATE & FILM Co., Ohio Ave. & Miami St., St. Louis, Mo. NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

FLANNEL

Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

THE, 636 11th Ave., New York, N. Y. ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

FOLDING MACHINERY

New York, N. Y.

BAUM, RUSSELL ERNEST, 615 Chestnut St., Phila., Pa. DEXTER FOLDER Co., 28 W. 23rd St.,

GLYCERINE

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

GRAINING FLINT

New England Quartz Co. of New York, 450 7th Ave., New York, N. Y. Senefelder Company, Inc., The, 32-34 Greene St., New York, N. Y.

GRAINING AND REGRAINING—Zinc, Aluminum, Glass and Multilith Plates

CHICAGO LITHO PLATE GRAINING Co., 214-16 N. Clinton St., Chicago, Ill. DOETZEL-COREY Co., 221 Third St., N. E., Cedar Rapids, Iowa.

Illinois Plate Graining Co., Inc., 913-921 W. Van Buren St., Chicago, Ill.

International Printing Ink Corp., The, 636 11th Ave., New York, N.Y. Lithographic Plate Graining Co. of America, Inc., 41 Box St., Brook-

lyn, N. Y.
McKenna, James J., 1015 Callowhill
St., Phila., Pa.

NATIONAL OFFSET SUPPLY Co., 613 N. Broadway, St. Louis, Mo.

Photo-Litho Plate Graining Co., Inc., 1207 S. Highland St., Baltimore, Md.

RELIABLE LITHOGRAPHIC PLATE Co.. INC., 17 Vandewater St., New York, N. Y.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

WESTERN LITHO PLATE & SUPPLY Co., 1019 Soulard St., St. Louis, Mo.

GRAINING MACHINES (See Plate Graining Machines)

GRAINING QUARTZ FLINT

NEW ENGLAND QUARTZ CO. OF NEW YORK, 450 Seventh Ave., New York, N. Y.

GUM ARABIC

nio

sh-

ral

e ...

RP.

Y.

02

32-

nt

t.,

t ...

de

vi-

ey

t.,

12-

ıc,

11.

t.,

0,

k-

ill

V.

2-

١.,

R

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.-1076 W. Division St., Chicago, Ill.-111 Binney St., Cambridge, Mass.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

HAND ROLLERS

ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

SIEBOLD, J. H. & G. B., Inc., 47 Watts St., New York, N. Y.

HUMIDIFICATION

AIR CONDITIONING SUPPLY Co., THE, 4066 Superior Ave., Cleveland, O. CARRIER ENGINEERING Co., Syracuse, N. Y.

Southworth Machine Co., 30 Warren Ave., Portland, Me.

HYDROQUINONE

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.-1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

SENEFELDER COMPANY, INC., THE, 32-

34 Greene St., New York, N. Y.

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

INK COMPOUNDS

INDIANA CHEMICAL & MFG. Co., Indianapolis, Ind.; New York City, N. Y., and Chicago, Ill.

ACHESON INK Co., INC., 142 Skillen St., Buffalo, N. Y.

ACME PRINTING INK Co., 1315 W. Con-

gress St., Chicago, Ill.

American Printing Ink Co., Div. General Printing Ink Corp., 2314 W. Kinzie St., Chicago, Ill.

August, Charles, Corp., The, 416 Orleans St., Chicago, Ill.

BLACKER, H., PRINTING INKS, INC., 304 Lock St., Cincinnati, O. Bowers Printing Ink Co., 711 W.

Lake St., Chicago, Ill. Braden-Sutphin Ink Co., 3700 Ches-

ter Ave., Cleveland, O.

CALIFORNIA INK Co., 545 Sansome St., San Francisco, Calif.

CRESCENT INK & COLOR CO. of PENNA., THE, 464 N. 5th St., Phila., Pa.

DRISCOLL, MARTIN, & Co., 610 Federal St., Chicago, Ill.

FLINT, HOWARD, INK Co., 2545 Scotten Ave., Detroit, Mich.

Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

GAETJENS, BERGER & WIRTH, INC., 35 York St., Brooklyn, N. Y., and 538 S. Clark St., Chicago, Ill.

HERRICK, WM. C., INK Co., INC., 325 W. 34th St., New York, N. Y.

HILL-HENTSCHEL Co., 3928 Clayton Ave., St. Louis, Mo.

INCO Co., THE, 1426 W. Third St., Cleveland, O.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y. JOHNSON, CHARLES ENEU, & Co., INC., 10th & Lombard Sts., Phila., Pa.

KOHL & MADDEN PRINTING INK Co., 731 Plymouth Court, Chicago, Ill. LEVEY, FREDERICK H., Co., INC., 1223 Washington Ave., Phila., Pa.

MAYER, ROBERT, Co., Inc., 1107 Grand St., Hoboken, N. J.

OKIE, FRANCIS G., 247 S. Third St., Phila., Pa.

ROBERTS, LEWIS, INC., 72 Union St., Newark, N. J.

ROOSEN, H. D., Co., Ft. 20th-21st St., Brooklyn, N. Y.

SENELITH INK Co., INC., THE, 32-34 Greene St., New York, N. Y.

SIEBOLD, J. H. & G. B., INC., 47 Watts St., New York, N. Y.

Sinclair & Carroll Co., Inc., 591 11th Ave., New York, N. Y. SINCLAIR & VALENTINE Co., INC., 11-21

St. Clair Pl., New York, N. Y. SLEIGHT METALLIC INK COMPANIES, Inc., 538 N. Third St., Phila., Pa. SUPERIOR PRINTING INK Co., INC., 295

Lafayette St., New York, N. Y. TRIANGLE INK & COLOR Co., INC., 26 Front St., Brooklyn, N. Y. (also Boston, Mass., Baltimore, Md., and St.

Louis, Mo.). WILLIAMS, R. S., Co., INC., 257 W. 17th St., New York, N. Y.

WINSLOW INK CORP., 124-132 White St., New York, N. Y.

INK WAX REDUCER (Smoothol Ink Wax) SMITH, FRANCIS X., Co., 952 E. 93rd St., Brooklyn, N. Y.

INSURANCE—Workmen's Compensation

N. Y. PRINTERS & BOOKBINDERS MU-TUAL INSURANCE Co., 147 Fourth Ave., New York, N. Y.

LAMPS, Arc

ATLAS ELECTRIC DEVICES Co., INC., 361 W. Superior St., Chicago, Ill. BEATTIE'S HOLLYWOOD HI-LITE Co., 1560 N. Vine St., Hollywood, Calif.

Gelb, Joseph, Mfg. Co., 250 W. 54th St., New York, N. Y.

MACBETH ARC LAMP Co., 875 N. 28th St., Phila., Pa.

PEASE, C. F., Co., THE, 2601 W. Irving

Park Road, Chicago, Ill.
Sullebarger, E. T., Co., 116 John
St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

LENSES

BAUSCH & LOMB OPTICAL Co., Rochester, N. Y. GOERZ, C. P., AMERICAN OPTICAL Co.,

317 E. 34th St., New York, N. Y. NORMAN-WILLETS Co., 318 W. Wash-

ington St., Chicago, Ill. PITMAN, HAROLD M., Co., 150 Bay St.,

Jersey City, N. J., and 51st Ave.

and 33rd St., Chicago, Ill.
Sullebarger, E. T., Co., 116 John
St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

ZEISS, CARL, INC., 485 Fifth Ave., New York, N. Y.

LINE-UP AND REGISTER MACHINES, SYSTEMS AND TABLES

CRAFTSMEN LINE-UP TABLE CORP., 49 River St., Waltham, Mass

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

HAMILTON MFG. Co., INC., Two Rivers, Wis.

LANSTON MONOTYPE MACHINE Co., 24th at Locust, Phila., Pa.

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

ROBERTSON, R. R., 400 W. Madison St., Chicago, Ill. WESEL MFG. Co., Scranton, Pa.

LITHO DEVELOPING INK

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.-1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.

LITHO ENGRAVING AND DRAWINGS

LITHO TRADE SERVICE STUDIO, 538 S. Clark St., Chicago, Ill.

MACHINISTS

RATHBUN & BIRD Co., INC., 85 Grand St., New York, N. Y.

MAGNIFYING AND REDUCING GLASSES

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

REPRO-ART MACHINERY Co., Wayne Ave. & Berkeley St., Phila., Pa. ZEISS, CARL, INC., 485 Fifth Ave., New

York, N. Y.

MAKE-UP TABLES

Lanston Monotype Machine Co., 24th at Locust, Phila., Pa.

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

ROBERTSON, R. R., 400 W. Madison St., Chicago, Ill.

WESEL MFG. Co., Scranton, Pa.

METAL DECORATING EQUIPMENT

WAGNER, CHARLES, LITHO MACHINERY Co., Div. of National-Standard Co., 51 Park Ave., Hoboken, N. J.

MOLESKIN AND MOLLETON

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N.Y. McKinley Litho Supply Co., 1600 John St., Cincinnati, O.

ROBERTS & PORTER, INC., 100 Lafayette St., New York, N. Y., and 402 S. Market St., Chicago, Ill.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y. SIEBOLD, J. H. & G. B., INC., 47 Watts

St., New York, N. Y.

WAGNER, CHARLES, LYTHO MACHINERY Co., Div. of National-Standard Co., 51 Park Ave., Hoboken, N. J.

MOTORS AND CONTROLLERS

CLINE ELECTRIC MFG. Co., 211 W. Wacker Drive, Chicago, Ill.

NEGATIVE MATERIALS

AGFA ANSCO CORP., Binghamton, N. Y. CRAMER, G., DRY PLATE Co., Lemp & Shenandoah Ave., St. Louis, Mo. EASTMAN KODAK Co., Rochester, N. Y. GEVAERT CO. OF AMERICA, INC., THE, 423 W. 55th St., New York, N. Y. HALOID Co., THE, 6 Haloid St., Rochester, N. Y. HAMMER DRY PLATE & FILM Co., Ohio Ave. & Miami St., St. Louis, Mo.

Ohio Ave. & Miami St., St. Louis, Mo. Norman-Willets Co., 318 W. Washing St., Chicago, Ill.

OFFSET PLATE MAKING SERVICE (See Plate Making Service)

OPAQUE AND DEVELOPING INK

Acheson Ink Co., Inc., Skillen St., Buffalo, N. Y.

ARTISTS' SUPPLY Co., 7610 Decker Ave., Cleveland, O.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y. OKIE, FRANCIS G., 247 S. Third St., Phila., Pa.

SENEFELDER COMPANY, Inc., The, 32-34 Greene St., New York, N. Y.

PAPER

AETNA PAPER Co., THE, Dayton, O. AMERICAN WRITING PAPER Co., Holyoke, Mass. BECKETT PAPER CO., THE, Hamilton, O. CANTINE, MARTIN, CO., THE, Saugerties, N. Y. and 41 Park Row, New York, N. Y.

Case & Risley Press Paper Co., Oneco, Conn.

CHAMPION PAPER & FIBRE Co., Hamilton, O.

CHILLICOTHE PAPER Co., THE, Chillicothe, O.

DILL & COLLINS, INC., Richmond & Tioga Sts., Phila., Pa.

FALULAH PAPER Co., Fitchburg, Mass., and 500 Fifth Ave., New York, N. Y. FRASER INDUSTRIES, INC., Graybar Bldg., New York, N. Y.

Hamilton, W. C., & Sons, Inc., Miquon, Pa.

HAMMERMILL PAPER Co., Erie, Pa. HOLLINGSWORTH & WHITNEY Co., 140 Federal St., Boston, Mass.

HOWARD PAPER Co., Urbana, Ohio INTERNATIONAL PAPER Co., 220 E. 42nd St., New York, N. Y. MAXWELL PAPER Co., Franklin, O.

NEENAH PAPER Co., Neenah, Wis. Northwest Paper Co., The, Cloquet, Minn.

RHINELANDER PAPER Co., Rhinelander, Wis.

RIEGEL PAPER Co., 342 Madison Ave., New York, N. Y.

WARREN, S. D., Co., 89 Broad St., Boston, Mass.

WATERVLIET PAPER Co., Watervliet, Mich.

WHITING, GEO. A., PAPER Co., Menasha, Wis.

PAPER CONDITIONING EQUIPMENT

ADVANCE MFG. Co., Inc., Louisville, Ky.

Southworth Machine Co., 30 Warren Ave., Portland, Maine.

STRACHAN & HENSHAW Co., LTD., 7th at Grange St., Phila., Pa.

PAPER CUTTING MACHINES

SEYBOLD DIVISION, HARRIS-SEYBOLD-POTTER Co., Dayton, O.

PAPER AERATION

Southworth Machine Co., 30 Warren Ave., Portland, Me.

PAPER HANGERS-Holdfast

Southworth Machine Co., 30 Warren Ave., Portland, Me.

PAPER JOGGING MACHINES

Southworth Machine Co., 30 Warren Ave., Portland, Me.

PARAFORMALDEHYDE-U. S. P.

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

PHOTO COMPOSING MACHINES

Lanston Monotype Machine Co., 24th at Locust, Phila., Pa. Rutherford Machinery Co., Div.

General Printing Ink Corp., 100 Sixth Ave., New York, N. Y. STRACHAN & HENSHAW Co., LTD., 7th

at Grange St., Phila., Pa. Wesel Mfg. Co., Scranton, Pa.

PHOTO LETTERING MACHINES

RUTHERFORD MACHINERY Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

PLATE COATING EQUIPMENT

LANSTON MONOTYPE MACHINE Co., 24th at Locust, Phila., Pa.
RUTHERFORD MACHINERY Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.
WESEL MFG. Co., Scranton, Pa.
ZARKIN MACHINE Co., 335 E. 27th St.,

PLATE GRAINING MACHINES

New York, N. Y.

FRITSCHE, R., 145 Hudson St., New York, N. Y.
Hoe, R., & Co., Inc., 910 E. 138th St., at East River, New York, N. Y.
McKinley Litho Supply Co., 1600
John St., Cincinnati, O.
Robertson, R. R., 400 W. Madison St., Chicago, Ill.
Wesel Mfg. Co., Scranton, Pa.
Zarkin Machine Co., Inc., 335 E.
27th St., New York, N. Y.

PLATE GRAINING MATERIALS

AMERICAN GRADED SAND Co., 2516
Greenview Ave., Chicago, Ill.
CARBORUNDUM Co., Niagara Falls, N.Y.
INTERNATIONAL PRINTING INK CORP.,
THE, 636 11th Ave., New York, N.Y.
MINNESOTA MINING & MANUFACTURING COMPANY, Saint Paul, Minnesota.

New England Quartz Co. of New York, 450 Seventh Ave., New York, N. Y.

SEIBOLD, J. H. & G. B., Inc., 47 Watts St., New York, N. Y.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y. ZARKIN MACHINE Co., INC., 335 E.

PLATE MAKING EQUIPMENT

27th St., New York, N. Y.

CALIFORNIA INK Co., INC., THE, 545
Sansome St., San Francisco, Calif.
LANSTON MONOTYPE MACHINE Co.,
24th at Locust St., Phila., Pa.
MILES MACHINERY Co., 18 E. 16th St.,
New York, N. Y.

RUTHERFORD MACHINERY Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

STRACHAN & HENSHAW Co., LTD., 7th at Grange St., Phila., Pa. WESEL MFG. Co., Scranton, Pa.

PLATE MAKING SERVICE

M

h

.,

N

0

n

6

CHICAGO LITHO PLATE GRAINING Co., 214 N. Clinton St., Chicago, Ill.
COLUMBIA OFFSET & REPRODUCTION

CORP., 2 Duane St., New York, N. Y. GRAPHIC ARTS CORP., 1104 Jackson Ave., Toledo, O.

KNOP & BRAUER, 1726 N. First St., Milwaukee, Wis.

LITHOPLATE Co., 101 E. Clybourn St., Milwaukee, Wis.

OFFSET ENGRAVERS ASSOCIATES, INC., 42 E. 20th St., New York, N. Y.

OFFSET PRINTING PLATE Co. OF NEW YORK, INC., 100 Bleecker St., New York, N. Y.

PHOTO-LITHO PLATE SERVICE Co., 113 St. Clair Ave., N. E., Cleveland, O. PRINTERS' OFFSET PLATE Co., 103

Lafayette St., New York, N. Y PROGRESSIVE FINE ARTS Co., 1027 N. Seventh St., Milwaukee, Wis.

RIGHTMIRE-BERG Co., 717 S. Wells St., Chicago, Ill.

SWART-REICHEL, INC., 461 Eighth Ave., New York, N. Y.

STEVENSON PHOTO COLOR SEPARATION Co., 222 W. Fourth St., Cincinnati, O.

PLATES-Aluminum, Zinc

ALUMINUM CO. OF AMERICA, Gulf Bldg., Pittsburgh, Pa.

AMERICAN ZINC PRODUCTS Co., Greencastle, Ind.

EDES MFG. Co., THE, Plymouth, Mass. ILLINOIS ZINC Co., 332 S. Michigan Ave., Chicago, Ill.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y. LITHOGRAPHIC PLATE GRAINING CO. OF AMERICA, INC., 41 Box St., Brooklyn,

N. Y. MATTHIESSEN & HEGELER ZINC Co., LaSalle, Ill.

NATIONAL LITHO PLATE Co., THE, 35 Meadow St., Brooklyn, N. Y. Photo-Litho Plate Graining Co.,

Inc., 1207 S. Highland St., Baltimore, Md.

RELIABLE LITHOGRAPHIC PLATE Co., Inc., 17 Vandewater St., New York,

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

PLATES-Dry

EASTMAN KODAK Co., Rochester, N. Y. GEVAERT CO. OF AMERICA, INC., THE, 423 W. 55th St., New York, N. Y. HAMMER DRY PLATE & FILM Co., Ohio Ave. & Miami St., St. Louis, Mo. NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

PRESSES-New

HARRIS-SEYBOLD-POTTER Co., 4510 E. 71st St., Cleveland, O.

Hoe, R., & Co., Inc., 910 E. 138th St. at East River, New York, N. Y. MIEHLE PRINTING PRESS & MFG.

Co., 14th St. and S. Damen Ave., Chicago, Ill.

RUTHERFORD MACHINERY Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

WAGNER, CHARLES, LITHO Ma-CHINERY Co., Div. of National-Standard Co., 51 Park Ave., Hoboken, N. J.

WEBENDORFER-WILLS Co., Inc., Mount Vernon, N. Y.

WILLARD PRESS MFG. Co., 28 W. 23rd St., New York, N. Y.

PRESSES-Rebuilt Litho

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

ZARKIN MACHINE Co., INC., 335 E. 27th St., New York, N. Y.

PRESS WASHERS AND ACCESSORIES

GEGENHEIMER, WM., INC., 78 Roebling St., Brooklyn, N. Y.

PROOF AND TEST PRESSES

RUTHERFORD MACHINERY Co., Div. General Printing Ink Corp., 100 Sixth Ave., New York, N. Y.

STRACHAN & HENSHAW Co., LTD., 7th at Grange St., Phila., Pa.

WAGNER, CHARLES, LITHO MACHINERY Co., Div. of National-Standard Co., 51 Park Ave., Hoboken, N. J.

PROOF PRESSES—Automatic

KRAUSE, KARL, U. S. CORPORATION, 55 Vandam St., New York, N. Y.

PUMPS-Vacuum and Air

GAST MFG. CORPORATION, 57 Mathieu Ave., Bridgman, Mich.

LEIMAN BROS., 23 Walker St., New York, N. Y., and 110 Christie St., Newark, N. J.

QUARTZ GRAINING SAND

NEW ENGLAND QUARTZ Co. OF NEW YORK, 450 Seventh Ave., New York,

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

REBUILT EQUIPMENT

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

ZARKIN MACHINE Co., INC., 335 E. 27th St., New York, N. Y.

BINGHAM BROS. Co., INC., 406 Pearl St., New York, N. Y.

BINGHAM'S, SAM'L, SON MFG. Co., Chicago, Ill.

CHICAGO ROLLER Co., INC., 554 W. Harrison St., Chicago, Ill.

DAYCO DIVISION, Dayton Rubber Mfg. Co., Dayton, O.

GODFREY ROLLER COMPANY, 211 N. Camac St., Phila., Pa.

IDEAL ROLLER & MFG. Co., INC., 2512 W. 24th St., Chicago, Ill., and 21-24 Thirty-ninth Ave., Long Island

City, N. Y.
RAPID ROLLER Co., Federal at 26th, Chicago, Ill.

ROBERTS & PORTER, INC., 100 Lafa-yette St., New York, N. Y., and 402 S. Market St., Chicago, Ill. Siebold, J. H. & G. B., Inc., 47 Watts

St., New York, N. Y.

VULCAN PROOFING Co., 58th St. & First Ave., Brooklyn, N. Y.

SCREENS-Halftone

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

OSTRANDER-SEYMOUR CO., THE., 1870 S. 54th Ave., Cicero Sta., Chicago, Ill.

PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave. and 33rd St., Chicago, Ill. REPRO-ART MACHINERY Co., Wayne

Ave. & Berkeley St., Phila., Pa.
Sullebarger, E. T., Co., 116 John
St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

SHADING MACHINES AND MEDIUMS

CRAFTINT MFG. Co., 210 St. Clair Ave., Cleveland, O.

DAY, BEN, INC., 118 E. 28th St., New York, N. Y.

SILVER BATHS

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

PHOTO SULPHITE SODIUM ANHYDROUS

HUNT, PHILIP A., COMPANY, 253 Russell St., Brooklyn, N. Y.-2432 Lakeside Ave., Cleveland, O.-1076 W. Division St., Chicago, Ill.—111 Binney St., Cambridge, Mass.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y. NORMAN-WILLETS Co., 318 W. Wash-

ington St., Chicago, Ill.

SPRAY GUNS

AMERICAN TYPE FOUNDERS SALES CORP., 200 Elmora Ave., Elizabeth, N. J.

DEVILBISS Co., THE, Toledo, O. PAASCHE AIRBRUSH Co., 1909 Diversey Parkway, Chicago, Ill.

SPRAYOMATIC PRODUCTS Co., 1120 Harrison St., Cincinnati, O.

STARTERS AND CONTROLLERS FOR ELECTRIC MOTORS

MONITOR CONTROLLER Co., INC., 51 S. Gay St., Baltimore, Md.

STRIPPING TABLE

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

WESEL MFG. Co., Scranton, Pa. ZARKIN MACHINE Co., INC., 335 E. 27th St., New York, N. Y.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y. PITMAN, HAROLD M., Co., 150 Bay St., Jersey City, N. J., and 51st Ave.

and 33rd St., Chicago, Ill. SINCLAIR & CARROLL Co., INC., 591 11th Ave., New York, N. Y.

TAPE-Black Gummed

METZGER, ALFRED E., 30 Irving Place, New York, N. Y.

TAX CONSULTANTS

KROMBERG, J., & ASSOCIATES, C. P. A.'s, 461 Eighth Ave., New York, N. Y. Levess, Herbert H., C. P. A., 360 W. 23rd St., New York, N. Y. REINISH, SAMUEL S., CI P. A., 2 Lafayette St., New York, N. Y.

TRADE LITHOGRAPHERS

HINSON & McAuliffe Corp., 203 E. 12th St., New York, N. Y.

TRANSFER PAPER

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N.Y. McKinley Litho Supply Co., 1600 John St., Cincinnati, O.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

SIEBOLD, J. H. & G. B., INC., 47 Watts St., New York, N. Y.

SINCLAIR & VALENTINE Co., 11 St. Clair Pl., New York, N. Y.

TRANSFER PROOFS—TYPE IMPRESSIONS

NEW YORK TYPE TRANSFER SERVICE, 237 Lafayette St., New York, N. Y.

TUSCHE

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N.Y. KORN, WM., INC., 260 West St., New York, N. Y.

SENEFELDER COMPANY, INC., THE, 32-34 Greene St., New York, N. Y.

TYPEWRITER COMPOSITION

GALLANT SERVICE, INC., 81 W. Van Buren St., Chicago, Ill. KOPY KOMPOSERS, Bourse Building, Phila., Pa.

TYPEWRITER RIBBONS Carbon Paper or Fabric REMINGTON-RAND, Buffalo, N. Y.

TYPEWRITERS

INTERNATIONAL ELECTRIC WRITING Machines Division of Interna-TIONAL BUSINESS MACHINES COR-PORATION, 590 Madison Ave., New York, N. Y.

REMINGTON-RAND, INC., Buffalo, N. Y. ROYAL TYPEWRITER Co., Two Park Ave., New York, N. Y.

SMITH, L. C., & CORONA TYPEWRITER, Inc., Syracuse, N. Y.

UNDERWOOD ELLIOTT FISHER Co., One Park Ave., New York, N. Y.

VACUUM AND PRINTING FRAMES

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

LANSTON MONOTYPE MACHINE Co., 24th at Locust, Phila., Pa.

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

OSTRANDER-SEYMOUR Co., THE, 1870 S. 54th Ave., Cicero Sta., Chicago, Ill. ROBERTSON, R. R., 400 W. Madison

St., Chicago, Ill. RUTHERFORD MACHINERY Co., Div.

General Printing Ink Corp., 100 Sixth Ave., New York, N. Y. SULLEBARGER, E. T., Co., 116 John St., New York, N. Y., and 538 S. Clark St., Chicago, Ill.

SWEIGARD-IDEAL Co., 6122 N. 21st St., Phila., Pa.

WESEL MFG. Co., Scranton, Pa. ZARKIN MACHINE Co., 335 E. 27th St., New York, N. Y.

VARNISH

AULT & WIBORG CORP., 75 Varick St., New York, N. Y.

CARTER, C. W. H., 100 Varick St., New York, N. Y.

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

ROOSEN, H. D., Co., Ft. of 20th & 21st St., Brooklyn, N. Y.

SIEBOLD, J. H. & G. B., INC., 47 Watts St., New York, N. Y.

SINCLAIR & CARROLL Co., 591 11th Ave., New York, N. Y. SINCLAIR & VALENTINE Co., 11 St.

VARNISHES—Overprint

CARTER, C. W. H., 100 Varick St., New York, N. Y.

Clair Pl., New York, N. Y.

GAETJENS, BERGER & WIRTH, INC., 35 York St., Brooklyn, N. Y., and 538 S. Clark St., Chicago, Ill.

HILO VARNISH CORP., 42-60 Stewart Ave., Brooklyn, N. Y.

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y. SINCLAIR & CARROLL Co., INC., 591

11th Ave., New York, N. Y.
SINCLAIR & VALENTINE Co., 11 St. Clair Pl., New York, N. Y.

VIBRATION ABSORBING AND WEAR RESISTING FLOORS AND FOUN-DATIONS

KORFUND Co., INC., THE, 48-15 32nd Pl., Long Island City, N. Y.

VOGELTYPE ALIGNING PAPER

VOGELTYPE Co., 24 Commerce St., Newark, N. J.

WASH-UP EQUIPMENT

INTERNATIONAL PRESS CLEANER & Mfg. Co., The, 112 E. Hamilton Ave., Cleveland, O.

WATER FOUNTAIN ETCH

INTERNATIONAL PRINTING INK CORP., THE, 636 11th Ave., New York, N. Y.

WET PLATE MATERIALS Negative Collodion Stripping Collodion Rubber Stripping Solution

Hunt, Philip A., Co., 253 Russell St., Brooklyn, N. Y.—2432 Lakeside Ave., Cleveland, O.—1076 W. Division St., Chicago, Ill.-111 Binney St., Cambridge, Mass.

MALLINKROCKDT CHEMICAL WORKS, 3600 N. Second St., St. Louis, Mo., and 72-74 Gold St., New York, N. Y.

NORMAN-WILLETS Co., 318 W. Washington St., Chicago, Ill.

WHIRLERS

DOUTHITT CORP., THE, 650 W. Baltimore Ave., Detroit, Mich.

LANSTON MONOTYPE MACHINE Co., 24th St. at Locust St., Phila., Pa.

MILES MACHINERY Co., 18 E. 16th St., New York, N. Y.

OSTRANDER-SEYMOUR CO., THE, 1870 S. 54th Ave., Cicero Sta., Chicago, Ill. RUTHERFORD MACHINERY Co., Div.

General Printing Ink Corp., 100 Sixth Ave., New York, N. Y. WESEL MFG. Co., Scranton, Pa.

ZARKIN MACHINE Co., INC., 335 E. 27th St., New York, N. Y.

A REASON WHY

every one who sells to lithographers should advertise in The Photo-Lithographer.

It is thoroughly read both by the men who buy - in the office, and by the men who have important influence in the matter of what should be bought - in the shop.



Whatever this crowd is looking at, you can be sure it is something dramatic — or big! It may be a 24-sheet poster or a dirigible.... Mr. Lutge in this article points out that today the advertising piece that commands the most attention has SIZE, either large illustrations within its pages, or a generous over-all format. He suggests that in catering to this trend, photo-lithographers can offer some advantages to advertisers.

&

P., Y.

t.,

Ē.

JUST as those who have billboards or car card space to sell promote advertising ideas which call for the use of those spaces, so we who have photo-lithography to sell must be on the job to promote advertising ideas that call for the use of our particular equipment and service in abundant measure. For just as some advertising ideas logically call for trade paper advertising, others for newspaper advertising, and still others for newspaper or direct-by-mail exploitation, so there are many advertising ideas which require the use of photolithography to carry them out most economically and most successfully.

We are on our sales jobs effectively only in the measure that we are alert to suggesting sales and advertising plans which call for using photolithography. We should operate in a sales way much the same as does the manufacturer of goods. We should endeavor to increase sales by suggesting as many uses for our facilities as possible, in the interests of stimulating "consumption."

The present day trend toward pictures in contrast to words, as is

TO PROMOTE MORE EXTENSIVE USE OF PHOTO-LITHOGRAPHY

evidenced by the popularity of such pictorial news publications as Life and Look, indicates a public receptiveness to getting its news and ideas through dynamic picturization. The success of magazines of this type also indicates that pictures, to have virility and the ability to challenge attention, must be of a life suggesting size.

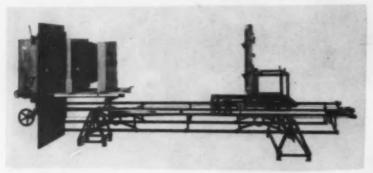
Photo-lithography, being so well adapted to that type of picturization, and having an opportunity to carry the same idea into the commercial world, should sell business firms on carrying out the same idea in their direct-by-mail advertising.

People are busy these days. This is particularly so in the case of those who have a sufficiently good financial standing to make them good advertising prospects. They are not disposed to read a thousand words regarding a commercial proposition in which somebody thinks they should be interested, but they will look at pictures that give them the same messages in a series of flashes.

If the sales arguments are properly presented, there is no reason why the manufacturer who is putting out information regarding his product in a small, but extremely wordy booklet, cannot be persuaded to tell that story more vividly through the aid of pictures that will enable him to reduce the wordage in his booklet to a few hundred words. This, with pictures to arouse interest in his sales message, will win attention for it, and arouse desire for what he offers.

Why should advertisers only describe the size of their plants, the elegance of their offices and the extent and character of their personnels, when all of these impressive features can be shown, through actual illustrations? Surely any advertiser will readily concede that it is better advertising to have a prospect actually see that a factory occupies a whole block, through a picture of it, than it is to ask him to imagine its bigness by simply stating that it is of that size.

It used to be that the cost of cuts and color plates prompted many advertisers either to eliminate illustrations or to reduce them in size to a degree that nullified their effectiveness. But with photo-lithography available, it is no longer excusable to employ a picture on an inadequate scale in one's advertising.



Levy "C" Precision Semi-Metal Camera, Dark Room Type

For Faithful REPRODUCTION!

LEVY CAMERAS

Standard and Dark Room Types—Made of Wood or Metal

LEVY

VACUUM PRINTING FRAMES
HALFTONE SCREENS
LENSES LAMPS

MANUFACTURED BY

REPRO-ART MACHINERY CO.

WAYNE AVE. & BERKELEY STREET

PHILADELPHIA, PA.

GOERZ

LENSES

for Photolithography
"The Most Exact Tools"



ARTAR APOCHROMAT

The ideal lens for color separation negatives. Color-corrected to produce images of the same size, to correctly superimpose in the finishing process. Focal lengths: 12 to 70 inches.

GOERZ PRISMS

of the Highest Accuracy— For reversed negatives to save stripping the film, and reduction work.

GOTAR ANASTIGMAT fi6.8, fi8, fi10

Assuring freedom from distortion, this is the ideal lens for intricate subjects requiring an intense clarity of definition. Focal lengths: 81/4 to 24 inches.

GOERZ FOCUSING MAGNIFIER

with Adjustable Tube — For real accurate focusing at a fixed distance from ground glass or in checking up negatives.

For FREE literature address DEPT. P. L. 8

LITHOGRAPHERS TO THE TRADE ONLY

SINCE 1921

COLOR COMMERCIAL

LETTERHEADS, ETC. in combination on Whitings Mutual Bond

HINSON, McAULIFFE CORP.

205 EAST 12th STREET

NEW YORK, N. Y.

Tel.—GRamercy 7-0180

CPGOERZ AMERICAN OPTICAL CO

CARTER HEADQUARTERS FOR

BURNT LITHOGRAPHIC VARNISHES, BURNT PLATE OILS, DRYERS, ETC.

Strictly Pure Always Uniform

For Metal Decorating . . . White Metal Finishing Varnishes, endorsed by Leaders

C. W. H. CARTER

100 VARICK STREET Established 1865 NEW YORK, N. Y.

Chicago Salos Agent EDWARD J. LEWIS — 9 SOUTH CLINTON ST.

VARNISHIES

"Adequate scale," as we use the words here, means using pictures that are sufficiently large to suggest the idea of bigness which an executive wants to get over when he shows an illustration of his factory or of the offices of his company. Anybody will agree that large pictures in themselves suggest bigness, whereas small illustrations contradict the very suggestion of bigness.

Any advertiser will concede that idea illustrations of packaged goods should show the actual size and colorings of the package. A package naturally will have truer shelf identity for the consumer if it is illustrated in actual size and color than if it is shown half or quarter its actual size. Photo-lithography makes it possible to portray packaged goods in that way in broadsides to dealers and consumers. We will have a more general insistence on full size package illustrations, if we emphasize the important advertising fact that illustrating a package in actual size is essential to registering it as a big value for dealers and consumers.

There also is today a quite general tendency to acquaint the prospects and customers of manufactured goods with the processes that are employed in making them. Firms that manufacture food products are particularly anxious to have their customers and their prospective customers impressed with the cleanliness of their plants. Large bakeries, packing companies, and dairies urge the public to visit their plants to see for themselves the precautions that are taken to insure sanitary manufacturing conditions. Only a very small proportion of those who are invited accept this invitation.

Hundreds upon hundreds of concerns that would like their customers to be more familiar with their plants, their processes, and the ingredients which go into the making of their goods, would be susceptible to the idea of taking their factories to their customers through broadside illustrations which vividly picture every detail of making their product a superlatively good one for Mrs. American Housewife's table.

Descriptive claims of using the largest and the best varieties of

fruits and berries should be illustrated with pictures which convincingly show ingredients of that standard. Such illustrations linger in the memories of those who see them, and prompt a preference for the products with which they are associated.

We believe that photo-lithographers could easily start a vogue for profusely illustrated broadsides. We have a lot more to build upon in that respect than had the publishers of Life in its new form, who invested a million dollars in their hunch, solely on the theory that it was a good one. Even so drab a broadside as the Giant Telegram made a big place for itself in the family of direct mailing pieces some years ago, and it is still going strong.

Big business is very anxious to impress the public with the fact that its large resources enable it to serve the public particularly well. It needs a new and a more convincing way of registering itself in the public consciousness. We have the vehicle for that in being in a position to supply direct photographic illustrations at so low a cost that it makes it good business to use them in profusion, and in sizes which make the pictures "big guns" that actually shoot the broadside, which is as it should be.

A folder isn't a broadside just by virtue of its being an advertising message that is printed on a large sheet. Something, many somethings, must shoot out of it to make it that. We are in a position to make the broadside live up to its name as it never has done before. There is a big sales reward for the industry in showing the business world something new and outstandingly better in broadsides.

What seems most particularly to need emphasizing in our industry is that we should center more pronouncedly on creating our own markets by submitting ideas which call for the use of photo-lithography. New products and processes have to do that to make places for themselves. We will not get very far in a sales way as long as we confine ourselves to bidding for jobs we can do only slightly better or more economically than they are being

done by other processes. Our sales ingenuity and effort should be applied to calling attention to those things we can do magnificently better, and at prices which put us in line to get commissions to do them.

The business world is ever alert to opportunities to do its merchandising job more efficiently than it is now being done. We will move forward to sales conquests at a remarkable rate if we will stress in our selling the many merchandising services photo-lithography is in a position to render. What we need is less of salesmen going to business men with photo-lithography, and more of photolithography salesmen visiting them with sales stimulating and marketing ideas that will be recognized as the means of selling more goods to more people, at lower cost. The merits and advantages of photo-lithography will be appreciated in just the measure that we indicate the many ways it can serve better than any other process.

When Buying Used Lens

When buying a second-hand photo-lens, great care should be exercised by the buyer before definitely parting with his money.

Such lenses are apt to be out of adjustment through careless handling without this damage being evident to the casual observer.

The prospective purchaser should be especially wary of lenses which appear to be "new" and yet are offered at greatly reduced prices.

Unscrupulous persons sometimes camouflage lenses of mediocre origin by remounting them and engraving the mount with the name and trademark of a reputable lens manufacturer.

Unless the buyer has the fullest confidence in the responsibility of the seller, he should make the purchase of a used lens subject to a check-up by the lens manufacturer for any possible defects in adjustment.

We are certain that every reputable lens manufacturer will gladly do such checking-up of his own product free or at a nominal charge.

-VERSATILITY SUPREME-

The New BAIJM Automatic Folder

• America's fastest-selling folder. Economical folded signatures an hour; folds thinnest to and dependable. It's also an Automatic Mul- thickest papers. 60 Styles of Folds. I to 5

tiple Perforating Machine. 15,000 to 50,000 folds in one operation. Accuracy unexcelled.

Only \$95 down * * * \$1 a Day

RUSSELL ERNEST BAUM 615 CHESTNUT STREET

PHILADELPHIA PA.

JUST AS . . . Tailor made suits fit better than readymade garments.

50 HILO OVERPRINT VARNISHES will fit your needs better than ordinary overprints.

No two plants operate just alike. Hilo Overprints are formulated to get the results you want under conditions in your plant.

FOR EXAMPLE: One of our customers was using a pale, fast drying overprint that gave good results on coated stock. But he found that cartons, when piled high as they came off the press, tended to offset. Hilo's laboratory produced an overprint that retained all the good qualities of this varnish and permitted the cartons to be piled high without offsetting—an overprint varnish made to fit!

> Our representative will be glad to discuss your needs with you. Let us know when he may call.

HILO VARNISH CORPORATION

42-60 Stewart Avenue Brooklyn, N. Y.

Boston

"75 Years in the Paint Industry"



What Others Think of THE PHOTO-LITHOGRAPHERS MANUAL.

"It's the finest effort ever presented to the photo-lithogra-phic industry. The industry now and in the future is in-debted to you, beyond every possibility to pay, for this splendid piece of work . .

"This book is worth every cent of \$10.00 for it serves so many purposes. Every apprentice should have one and should read it several times, no matter what department be may be in. Each man in every plant that does anything important at all should own one."

. We also wish to commend you most highly on the excellent editing job done in connection with this book. Our men have been most enthusiastic in their praise of the material it contained, and of its usefulness from a practical standpoint."

ALL FOR \$4.00

WALTWIN PUBLISHING COMPANY

1776 Broadway, New York, N. Y.

A REASON WHY

every one who sells to lithographers should advertise in The Photo-Lithographer.

It is thoroughly read both by the men who buy - in the office, and by the men who have important influence in the matter of what

should be bought - in the shop. They appreciate its instructive and educational editorial content covering all phases of photo-lithography.

CONVERSION TABLE FOR DENSITIES

THE Photo-Lithographer has received a number of inquiries regarding reliable conversion tables for densities. In answer to these inquiries, and with the feeling that many other lithographers may find such tables of frequent usefulness, the following tables are published. They have been prepared expressly for The Photo-Lithographer.

Equivalent of Degrees Baume (American Standard) and Specific Gravity at 60° F.

For Liquids Heavier than Water

Degrees Baume	Specific Gravity	Degrees Baume	Specific Gravity	Degrees Baume	Specific Gravity	Degrees Baume	Specific Gravity	Degrees Baume	Specific Gravity	Degrees Baume	Specific Gravity
0.0	1.0000	.4	1.0240	.8	1.0492	. 2	1.0757	.6	1.1035	17.0	1.1328
. 1	1.0007	.5	1.0247	.9	1.0500	.3	1.0765	.7	1.1043	. 1	1.1337
. 2	1.0014	.6	1.0255	7.0	1.0507	.4	1.0773	.8	1.1052	. 2	1.1346
.3	1.0021	.7	1.0262	.1	1.0515	.5	1.0781	.9	1.1060	.3	1.1355
. 4	1.0028	. 8	1.0269	. 2	1.0522	.6	1.0789	14.0	1.1069	.4	1.1364
	1.0035	.9	1.0276	.3	1.0530	.7	1.0797	I.	1.1077	.5	1:1373
.6	1.0042	4.0	1.0284	.4	1.0538	.8	1.0805	.2	1.1086	.6	1.1381
.7	1.0049	. 1	1.0291	.5	1.0545	.9	1.0813	.3	1.1094	.7	1.1390
. 8	1.0055	.2	1.0298	.6	1.0553	11.0	1.0821	.4	1.1103	. 8	1.1399
.9	1.0062	.3	1.0306	.7	1.0561	. 1	1.0829	.5	1.1111	.9	1.1408
1.0	1.0069	.4	1.0313	.8	1.0569	. 2	1.0837	.6	1.1120	18.0	1.1417
. 1	1.0076	.5	1.0320	.9	1.0576	.3	1.0845	.7	1.1128	. 1	1.1426
. 2	1.0083	.6	1.0328	8.0	1.0584	.4	1.0853	.8	1.1137	. 2	1.1435
.3	1.0090	.7	1.0335	. 1	1.0592	.5	1.0861	.9	1.1145	.3	1.1444
.4	1.0097	. 8	1.0342	.2	1.0599	6	1.0870	15.0	1.1154	.4	1.1453
. 5	1.0105	.9	1.0350	.3	1.0697	.7	1.0878	. 1	1.1162	.5	1.1462
.6	1.0112	5.0	1.0357	.4	1.0615	. 8	1.0886	. 2	1.1171	.6	1.1472
.7	1.0119	1.1	1.0365	.5	1.0623	.9	1.0894	.3	1.1180	.7	1.1481
. 8	1.0126	. 2	1.0372	.6	1.0630	12.0	1.0902	.4	1.1188	.8	1.1490
.9	1.0133	-3	1.0379	.7	1.0638	. 1	1.0910	.5	1.1197	.9	1.1499
2.0	1.0140	.4	1.0387	.8	1.0646	.2	1.0919	.6	1.1206	19.0	1.1508
, 1	1.0147	.5	1.0394	.9	1.0654	-3	1.0927	.7	1.1214	.1	1.1517
. 2	1.0154	.6	1.0402	9.0	1.0662	.4	1.0935	.8	1.1223	. 2	1.1526
.3	1.0161	-7	1.0490	1.1	1.0670	.5	1.0943	.9	1.1232	.3	1.1535
.4	1.0168	.8	1.0417	.2	1.0677	.6	1.0952	16.0	1.1240	.4	1.1545
. 5	1.0175	.9	1.0424	.3	1.0685	.7	1.0969	. 1	1.1249	.5	1.1554
.6	1.0183	6.0	1.0432	.4	1.0693	.8	1.0968	. 2	1.1258	.6	1.1563
.7	1.0190	, 1	1.0439	.5	1.0701	.9	1.0977	.3	1.1267	.7	1.1572
.8	1.0197	. 2	1.0447	.6	1.0709	13.0	1.0985	.4	1.1275	.8	1.1581
.9	1.0204	.3	1.0454	.7	1.0717	.1	1.0993	.5	1.1284	.9	1.1591
3.0	1.0211	.4	1.0462	.8	1.0725	. 2	1.1002	.6	1.1293	20.0	1.1600
.1	1.0218	. 5	1.0469	.9	1.0733	.3	1.1010	.7	1.1302	20.0	
. 2	1.0226	.6	1.0477	10.0	1.0741	.4	1.1018	.8	1.1310		
.3	1.0233	.7	1.0484	.1	1.0749	.5	1.1027	.9	1.1319		

Comparative Readings in Grains of Silver per Fluid Ounce and Specific Gravity on an Eastman Hydrometer.

Grains of Per Fluid	Sil	lo	er											Specific Gravity at 60° F.
0														1.000
11						,						,		1.020
22			*					*	,		*			1.040
333	4.													1.060
40														1.071
45					,							*		1.080
501	٤.		*	*		*		×						1.090
56														1.100
673	٤.	0		0			9		0	0	0	0	9	1.120
70				0					9	0				1.122
80		0						0	0			0		1.142

You will be disappointed and sorry

If you do not make arrangements to attend the Sixth Annual Convention of the N.A.P.L. There will be interesting events on every one of the three days — October 6, 7, 8. Early reservations are advisable if you want to stay at the Wardman Park Hotel, the center of Convention activities. Keep in mind that at least 400 lithographers are expected to attend.



"ASCO" OPAQUE BLOCKS OUT WITH A SINGLE STROKE

Exceptional opacity permits close contact with print.

Ground extremely fine. Flows freely from brush, pen or airbrush. Leaves a thin smooth film that will not crack or chip off.

ARTISTS SUPPLY COMPANY

7610 Decker Ave. Cleveland, Ohio
Ask your dealer for "Asco"

All models of the

COMPOSING MACHINE

permit the use of dozens of sizes and styles of type

RALPH C. COXHEAD CORP.

17 PARK PLACE

NEW YORK, N. Y.

SULLEBARGER

For

CAMERAS SCREENS LENSES

VACUUM FRAMES WHIRLERS CARBONS

ARC LAMPS OKAY OPAQUE OKAY DEVELOPING INK

E. T. SULLEBARGER CO.

114 JOHN STREET NEW YORK, N. Y.

538 SOUTH CLARK ST. CHICAGO, ILL.

KORN'S

LITHOGRAPHIC CRAYONS

- CRAYON PAPER PENCILS
- 84 STICK TUSCHE
- LIQUID TUSCHE
- RUBBING INK TRANSFER INK

AUTOGRAPHIC TRANSFER INK MUSIC-PLATE TRANSFER INK

Manufactured by

WM. KORN. INC.

260 WEST STREET

NEW YORK

STEP UP YOUR SALES

WITH STEP INDEXING>

JOHN M. GETTLER BOOKBINDER

Serving the Lithographer since 1847

SPECIALIZING IN

INDEXING - BOUND BOOKS - CATALOGS LEATHER - CLOTH - PAMPHLET BOOKBINDING

200 VARICK STREET

NEW YORK, N.Y.

TELEPHONE: WALKER 5-0222-0223

YOUNG EXECUTIVE

is looking for opportunity with progressive firm that can use man with following qualifications:

use man with following qualifications:

Four years as office manager in charge of accounting, financing, and costs; also in charge of production in straight lithograph company... Over one year selling commercial posters and displays and handling sales correspondence... Six months doing public auditing with a national auditing firm... Four years as head of order department and one year as estimator in large photo-offset house... Two years as production manager and shop foreman in a color photo-offset shop... Personable appearance. Born in West, of Scandinavian-German stock. Age 36... Education: High School graduate, and four years in college and university.... Prefer connection in Metropolitan area but will consider other Prefer connection in Metropolitan area but will consider other localities if attractive enough.

BOX A-1, THE PHOTO-LITHOGRAPHER

DEXTER FOLDER COMPANY

Headquarters for Press Feeders, Dexter and Cleveland Folders, Stitching and Trimming Machines.

Main Office: PEARL RIVER, N. Y.



OFFSET OR LETTER PRESS

Get Your Copy of These Books Today, No Cost—No Obligation

American Made by Webendorfer-Wills Co., Inc.
Builders of Printing Machinery
for Over Thirty Years
Mount Vernon, New York, U.S.A.



DESIGNING Will' PEN DRAWING ENGRAVING 55 RAMSEY AVENUE. RETOUCHING NEGATIVES

YONKERS, N.Y. TINTS AND BORDERS FOR COUPONS.CHECKS.CERTIFICATES

lwaukee

for all presses. Also some rebuilt units. Write C. B. Henschel Mfg. Co., Milwaukee, Wisc.

CLASSIFIED ADVERTISING

Rates for this section, 25 cents per line; minimum \$2.50. Count eight words to the line; address to be counted. Remittance must accompany order. Box number addresses are confidential and cannot

be revealed. Unless otherwise stated address replies to The Photo-Lithographer, 1776 Broadway, New York, N. Y.

SITUATIONS WANTED

Line Photographer with some knowledge of half-tone. Experienced. Excellent references. Box A-5.

Litho Artist, labels and commercial work, efficient in modern methods of reproduction, reliable, wants steady position with progressive house. Box. A-2.

LITHOGRAPH OFFSET FOREMAN—twelve years experience as cameraman, stripper, layout man in Plate Department desires position as foreman or in any branch of lithography. Box A-4.

HELP WANTED

LABEL SALESMEN WANTED — San Francisco lithograph concern wants representatives in all principal cities in United States to sell beverage, wine, liquor, can, and box end labels. Strictly commission 10%. When answering give complete details, including age, six business references, experience, and names and addresses of former employers.

Applications will not be considered or answered unless complete details are furnished. Box A-3.

LITHOGRAPHIC SERVICES

STATLER COLOR CORRECTION BUREAU

Send your color plates to us for dot-etching — Moderate fees . . . Union Labor . . . Expert Craftsmanship.

149 West 25th Street

Call CHelsea 3-5132

SUMMER PLATE TINTING scumming eliminated by simple formula charge reasonable fee guaranteed.

Manor Press, 101-11 Jamaica Ave., Richmond Hill, N. Y.

THE PHOTO-LITHOGRAPHERS MANUAL

is the kind of a book you will have to keep under lock and key if you want to find it when you want it. Everyone in your office and plant will soon discover that it is an invaluable reference for all kinds of information.

Order your copy now - only \$4.00

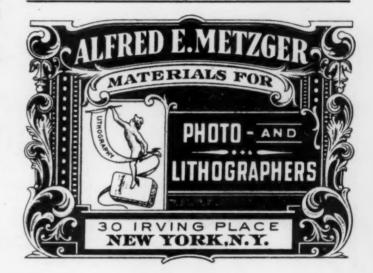
Waltwin Publishing Co., Inc., 1776 Broadway, N. Y.

FOR SALE

Offset Press for sale. 28 x 34 Hall Press — hand feed — good condition — low price — unusual opportunity — see Lee Coleman, Academy Photo Offset Co., 36 West 15th St., N. Y. C. Al. 4-1994.

40 x 40 all metal, motor controlled, Levy Camera with stand; for both film and wet plate; Hoe Hand Proof Press 30 x 36. Both in fine condition. Allan B. Croke Co., 163 Oliver St., Boston, Mass.

Lanston Monotype Offset Proof Press, type DHP, 30 x 36, work size 28 x 35, plate and bed moveable, late model, A-1 condition, new cost \$2700.00, price \$1950. E. T. Sullebarger Company, 538 So. Clark Street, Chicago.



A Lot of Special Features

A lot of special features will appear in the September issue of The Photo-Lithographer, in addition to the annual equipment review. The best way to make sure you will get your copy is to subscribe now. The regular subscription is only \$3.00 — less if you send in two or more.

You, too, will say

when you use

OKAY OPAQUE

For better finished negatives—smooth-flowing, dense opacity, quick-drying, non-cracking.

UKAY DEVELOPING INK

For dependable press plates—easily ap-plied, clear, sharp, acid-resistant image, long press life, releases easily from bare grain under high humidity.

UKALI CELLULOSE OPAQUE

For masking—no sheet preparation to get a "bite," lays smooth without creeping or running, dense opacity, quick-drying, non-cracking, film easily removed with water.

Okay wet process opaque

Oil base, a new development — lays smooth without piling, dense, tenacious, will not chip or flake under heat, does not injure negative, film easily removed with alcohol.

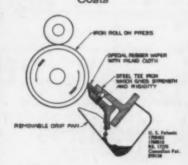
Send for Samples

FRANCIS G. OKIE CO.

247 SOUTH 3rd STREET, PHILADELPHIA

INTERNATIONAL PRESS CLEANERS

are daily demonstrating their efficiency in increasing Output and Lowering Production Costs



THIS IS OUR METHOD OF REMOVING INK FROM PRESS

We invite you to take advantage of our thirty day trial offer. If in-terested write and let us know the size and make of your press.

INTERNATIONAL PRESS CLEANER & MFG. CO.

112 Hamilton Ave. Cleveland, O.

ADVERTISING INDEX

August, 1938

6

Agfa Ansco Corp3rd Cover	Light-A-Liner Co
Artists Supply Co 64	Litho Chemical & Supply Co 34
***	Lithographic Plate Graining Co.
Baum, Russell Ernest	of America, Inc 40
Bingham's, Sam'l, Sons Mfg. Co. 44 Agency: The L. W. Ramsey Co., Chicago, III.	Mallinckrodt Chemical Works 46 Agency: The Victorie Co., St. Louis, Mo.
	Merck & Co
Carter, C. W. H 60	Metzger, Alfred E
Chillicothe Paper Co	Mille, W. P 64
Classified Advertising 65	Moore, W. L 50
Coxhead, R. C., Corp 64	
Crescent Ink & Color Co. of Penna. 52	Norman-Willets Co 52
Dexter Folder Co	Northwest Paper Co
Driscoll, Martin, Co 52	Okie, Francis G 66
Eastman Kodak Co 27	Rapid Roller Co
Fuchs & Lang Mfg. Co., Div. General Printing Ink Corp. 28	Reliable Lithographic Plate Co., Inc
Gaetjens, Berger & Wirth, Inc 42	Roberts & Porter, Inc
Gettler, John M 64	Senefelder Co., Inc., The 4
Goerz, C. P., American Optical Co. 60	Senelith Ink Co., Inc2nd Cover
	Siebold, J. H. & G. B., Inc 40
Hammermill Paper Co 30	Sinclair & Carroll Co
Hammermill Paper Co30 Agency: Batten, Barton, Durstine & Osborn, Inc., New York, N. Y.	Sinclair & Valentine Co
Harris-Seybold-Potter Co.	
3rd and 4th Cover Agency: Baker and Baker & Associates, Inc., Cleveland, O.	Sullebarger, E. T., Co
Henschel, C. B., Mfg. Co 64	Swart-Reichel, Inc 52
Hilo Varnish Corp 62	Triangle Ink & Color Co. Inc. 44
Hinson, McAuliffe Corp 60	Triangle Ink & Color Co., Inc 44 Trussell Mfg. Co8-38 Agency: Renner Advertisers, Philadelphia, Pa.
Illinois Plate Graining Co., Inc 50	
International Press Cleaner & Mfg. Co	Vulcan Proofing Co
	Webendorfer-Wills Co., Inc 64
Korn, William, Inc 64	"Where-To-Buy-It"53-58
Latham, C. W., Associates 50	Zarkin Machine Co., Inc 9
Leiman Bros 11	Zeiss, Carl

(The Advertiser's Index has been carefully checked but no responsibility can be assumed for any omission)

FOR BEST RESULTS USE BEST MATERIALS

It's so dependable for camera and contact frame exposures.

REPROLITH THIN-BASE



Offers these features:

- 1. EXTRA THIN SAFETY-BASE (.004" THICK)
- 2. MAXIMUM CONTRAST
- 3. GREATEST RESOLVING POWER
- 4. EXTRA LATITUDE IN DEVELOPMENT
- 5. ANTI-HALATION COATING
- 6. SAFETY BASE
- 7. RELIABLE UNIFORMITY

AGFA ANSCO CORPORATION IN BINGHAMTON, NEW YORK



HARRIS ANNOUNCES ITS CHEMICAL DIVISION

• A few years ago the Harris-Seybold-Potter Company started a Research and Development program to improve and to standardize the chemical side of lithographic plate making and printing. • In this program of research, development, and standardization of the lithographic process we have prepared new chemicals for the two major plate making processes, namely the surface plate process and the deep etch process. • The Surface Plate Process utilizes new synthetic materials in the coordinated series of steps to give plates of superior quality and life. . The Deep Etch Process also utilizes new synthetic materials to effect a saving of time and money in the preparation of the highest quality intaglio or deep etch plates. . Detailed information may be obtained by writing to the company. A cordial invitation is extended to employers to send any interested employee to Cleveland for instruction and demonstration.

HARRIS · SEYBOLD · POTTER COMPANY

GENERAL OFFICES: 4510 EAST 71ST STREET . CLEVELAND, OHIO

